BACKGROUND PAPER

FINANCIAL MANAGEMENT OF EDUCATION

IN BRITISH COLUMBIA

March, 1984

84- 4202 /

Fleming, J. R. (John Raymond), 1936-
Financial management of education in British Columbia

Co-authored by J.R. Fleming and B. Anderson. Cf. Foreword.
ISBN 0-7718-8430-3

1. Education - British Columbia - Finance. 2. Education - British Columbia - Finance - History. I. Anderson, Barry D. (Barry Douglas), 1942- . II. British Columbia. Ministry of Education. III. Title.

LB2826.6.C3F43 1984 379.1'222'09711 C84-092161-6

F O R E W O R D

This document has been prepared by the Ministry of Education to put developments in education finance in British Columbia into an historic perspective. The paper was co-authored by J. R. Fleming, Assistant Deputy Minister, Educational Finance and Dr. B. Anderson, Executive Director, Educational Finance Research and Economic Analysis. The authors can be contacted:

c/o Ministry of Education
Parliament Buildings
Victoria, B. C.
V8V 2M4

TABLE OF CONTENTS

		Page
1.	HISTORIC REVIEW OF EDUCATION FINANCING SYSTEMS	1
1.1	The Cameron Report (1945)	1
1.2	The Campbell Formula (1955)	2
1.3	Revisions to the Campbell Formula (1968)	2
1.3.1	The Basic Education Program	3
1.3.2	Capital Costs	4
1.3.3	Homeowner Grant	4
2.	RAPID GROWTH IN EXPENDITURES AND REVENUES - PRE-1976	5
3.	RESPONSE TO RAPID EXPENDITURES GROWTH (1976 - 1981)	11
3.1	Continued Growth in Expenditures	11
3.2	Responses to Growth in Expenditures	11
3.2.1	Rate of Growth in Grants	11
3.2.2	Reductions in Residential Taxation	13
3.2.3	Implementation of Actual Value Assessment	13
3.2.4	Rapid Growth in Assessed Values	13
3.3	Consequences of Continued Growth in Expenditures	15
4.	MAJOR REVIEW OF FINANCING SYSTEMS (1981)	18
4.1	1981 School Taxes	18
4.2	Criticisms of the Pre-1982 Financing System	23
5.	TAX REFORM AND RESTRAINT (1981 - 1982)	25
5.1	Restraint I - March, 1982	25
5.1.1	The Funding System	25
5.1.2	The Budget System	26

Page

5.1.3 The Taxation System. 26

5.1.4 Compensation Stabilization 27

5.2 Restraint II - July, 1982 27

5.2.1 The Funding System 28

5.2.2 The Budget System. 28

5.2.3 The Tax System 29

5.2.4 Compensation Stabilization 30

6. NEW SYSTEMS AND LONG-RANGE PLANS (1983 - 1984) 31

6.1 Objectives of the New System. 31

6.2 Components of the Revised System. 33

6.2.1 The Budget System. 33

6.2.2 The Fiscal Framework System. 35

6.2.3 Additions to the Fiscal Framework. 36

6.2.4 3-Year Transition to the Fiscal Framework. 37

6.2.5 Overview of the New System 38

7. CONSEQUENCES OF RESTRAINT AND THE NEW SYSTEM 40

8. SUMMARY AND FUTURE DIRECTIONS. 45

8.1 Review of the Data. 45

8.2 Future Developments 51

LIST OF TABLES

		Page
Table 1	Actual Homeowner Taxes Compared with Hypothetical Taxes Based on Uniform Increases in Assessed Values (1981).	19
Table 2	Sources of 1981 School Tax Increases for the Average Single Family Residence.	20
Table 3	Net School Taxes on the Average Single Family Property by School District (1980 - 1983)	21

LIST OF FIGURES

		Page
Figure 1	Total Gross Budgets Per Pupil, FTE Pupils (1971 - 1976)	6
Figure 2	Total Gross Budgets, 1971 - 1976	7
Figure 3	Index of FTE Teachers & Pupils, 1972 - 1976	9
Figure 4	PTR and Average Class Size, 1972 - 1976	10
Figure 5	Total Gross Budgets Per Pupil, FTE Pupils, 1976 - 1981	12
Figure 6	Total Gross Budgets, 1976 - 1981	13
Figure 7	Index of FTE Teachers & Pupils, 1976 - 1981	16
Figure 8	PTR and Average Class Size	17
Figure 9	Reporting Structure for Operating Budget Expenditures	34
Figure 10	Information Flow	39
Figure 11	Total Gross Budget Per Pupil, FTE Pupils, 1980 - 1986	41
Figure 12	Total Gross Budgets, 1980 - 1984	42
Figure 13	Index of FTE Teachers & Pupils, 1980 - 1984	43
Figure 14	PTR and Average Class Size, 1980 - 1984	44
Figure 15	Total Gross Budget Per Pupil, FTE Pupils, 1971 - 1986	46
Figure 16	Total Gross Budgets, 1971 - 1984	47
Figure 17	Index of FTE Teachers & Pupils, 1971 - 1984	48
Figure 18	PTR and Average Class Size, 1972 - 1984	49
Figure 19	Staff Allocation, 1975 - 1983	50

I. HISTORIC REVIEW OF EDUCATION FINANCING IN BRITISH COLUMBIA

This section provides a general introduction to the system of financing public school education used in B.C. Several issues arising from the system are outlined.

Financing of public education in British Columbia, as described in the School Act, involves a joint funding system of local taxes and provincial grants which has gradually evolved over the past century. The primary determinants of the system as it exists today are the Cameron report (1945), the Campbell commission study (1955), the revisions of 1968, and the revisions of 1982.

1.1 The Cameron Report (1945)

The major objective identified by the Cameron report was the provision of equal educational opportunity throughout the province. To encourage this goal, the commission recommended that payment of educational grants by the Province be related to the tax base or ability to pay of each school district. To encourage this end, a finance formula based on a basic education program and an amalgamation of many small school districts was recommended and subsequently adopted by the provincial government. Costs of the basic education program were covered by a local property tax and a provincial government grant. The actual amount of the basic property tax levy was specified by the Provincial Government, as were grants to school districts for such items as teachers' salaries and pupil supervision costs.

Although the proposal to expand the size of school districts had the desired result of improving the efficiency and cost-management of the districts, the actual financing formula was less successful. As mentioned, the formula assigned specific amounts for grants and mill rates but failed to adjust automatically to the impact of inflation. It became necessary to make periodic adjustments to these amounts as well as to provide additional revenue sources to local government. The success of the property tax levy as a device to obtain financial equity was also marred by the absence of standard assessment procedures throughout the province.

In the early 1950's these difficulties prompted the provincial government to establish a committee chaired by Dr. Campbell, Deputy Minister of the Department of Education, to review education financing. This committee found that grants had not kept pace with the rate of growth of educational costs. Moreover, the system of fixed grants to municipal school districts was criticized on the grounds that it failed to recognize differences in local ability to pay while the system of grants to rural districts, which provided for only limited local contributions to school costs, was described as discouraging efficient cost-management. The conclusion of the committee was, therefore, to recommend implementation of a formula based, once again, on equal access to a basic level of education and equalized revenues for education at the local level.

. . . /2

1.2 The Campbell Formula (1955)

The Campbell formula, adopted in 1955, provided four provincial grants to each school district:

1. a basic grant equal to the amount by which teachers' salaries and approved operating expenditures exceeded revenue derived from a local property tax levy (10 mills in municipalities and seven mills in villages and rural areas);

2. a supplementary grant available to school boards required to meet increased operating costs resulting from enrolment growth (75 percent of the increase in operating costs);

3. a capital grant of 50 percent for the first three mills of the board's approved capital costs. Any capital costs above three mills were eligible for a government grant of 75 percent in order to assist districts with high capital costs; and

4. a transportation grant calculated on the basis of number of pupils to be transported and miles travelled.

This system of school financing has been described as a foundation program plan in the sense that equal opportunity is provided for access to a basic education program. Local tax effort is equalized in that a standard tax rate is applied and costs for the basic education program which exceed these local revenues are then covered by provincial grants. Finally, local authorities are given the authority to provide improvements to this program by levying additional property taxes over and above the standard tax rate.

Following its introduction, various adjustments were made to the Campbell formula to account for the addition of new programs (kindergarten, senior matriculation) and increasing inflation (increased grants, higher local property levies). The impact of inflation necessitated regular review of grant payments so that in 1967/68, the government announced its intention to revise the financing formula.

The new formula, which was implemented in 1968 continued to have as its objectives the provision of a consistently high basic level of education and an equitable school tax base for each school district. The new formula also continued to rely on local property taxes and provincial grants to fund public school education. However, several changes were made to the way in which grants were calculated. The formula which was implemented in 1968 remained largely unchanged until 1982.

1.3 Revisions to the Campbell Formula (1968)

The education finance formula distinguished between expenditures necessary for the provision of the basic education program and expenditures for improvements or programs over and above this base, and between school board operating budgets and capital costs.

Note: The term "tax rate" is now used by the Province rather than "mill rate", the term used at the time. Taxes on a piece of property are found by multiplying the tax or mill rate by the assessed value of the property.

1.3.1 Basic Education Program

The cost-sharing formula for education operating costs was applied against the cost of providing a basic education program (BEP). The term was often misunderstood. The program referred to was a financial program, not an educational one. It represented the financial base for the next year's budget. It did not describe the cost of offering a certain set of basic courses or subjects in the school system, although it may have done so, in the opinion of some, at its inception.

Calculation of the cost of the program depended on the number of instructional units in the province as well as the calculated cost of each unit. Every 20 full-time equivalent students or part thereof constituted one instructional unit. Two kindergarten pupils were considered equivalent to one full-time student and children enrolled in approved special programs were counted once in a regular instructional unit and second in a special unit at 80 percent of a regular unit. In addition, one instructional unit was added for each school.

The second determinant of BEP operating costs, the value of each instructional unit, was calculated by dividing the previous year's total operating costs of all school boards by the number of instructional units in that year. This unit value was then multiplied by the number of instructional units. To the product of this calculation was added the cost of such basic auxiliary services as transportation, health services, boarding allowances and special busing costs.

The calculation of the Basic Education Program was arithmetically based on the previous year's total expenditures and was virtually equal to 100% of the previous year's costs.

Of the BEP cost, a portion was covered by revenue collected at a standard province-wide tax rate set annually by the Cabinet and applied against the assessment base for school tax purposes in each school district. The revenue which was collected by means of levying the standard tax rate against the assessment base constituted the local contribution to the basic education program operating costs. Any BEP costs above this amount were then met by provincial government grants.[1]

The size of the provincial government grant to each school boards BEP was determined by the value of the BEP in that district (number of instructional units in the district multiplied by standard cost of each unit), the basic tax rate for property taxes, and the size of the assessment base in that district. The grant thus served to ensure that each board exerted equitable tax effort to obtain education programs which should be comparable from district to district.

---

1. The provincial grant to each board's BEP was only one of the grants made by the province to support school boards' expenditures. Other grants, including capital grants, are described later.

Should the school board wish to spend more money than the BEP provided, it had the authority to levy an additional school tax over and above the standard tax rate. Most, if not all, school boards imposed additional charges. This system was praised for allowing a degree of local autonomy as well as accountability for additional expenditures. However, the increased costs were included in total operating costs when the BEP for the subsequent years was calculated. As a result boards were accountable for only one year. In subsequent years the costs of these local decisions were included in the BEP as shared cost. This disguised the longer-range impact of local spending decisions.

These locally selected, automatic additions to the BEP, made it easy for boards to criticize the Province for not keeping pace with their local spending aspirations. In the absence of an educational rationale for the BEP, the argument became solely a political-financial issue, with no attention paid to issues of educational quality and pupil achievement.

1.3.2 Capital Costs

Capital costs for public education are also shared by local and provincial governments. Capital costs for school facilities are financed by the sale of debentures to the British Columbia School Districts Capital Financing Authority. The costs for retirement of the principal and interest charges are then shared by the province and the district.

For the first six mills which would be necessary to cover annual debt charges, the province and board share costs on a 50-50 basis. Should additional funds be necessary, the next six mills are shared with the province meeting 75 percent and the school board collecting for 25 percent of the costs. Any outstanding balance beyond this amount is then shared 90-10 with the province bearing the largest portion. Thus, irrespective of the size of the capital debt, no board will have to meet more than about 4.5 mills for debt charges. This system of cost-sharing was introducted to assist the boards with particularly high capital costs and low assessed values.

1.3.3 Homeowner Grant

In addition to provincial grants to school boards, the provincial government provides a grant to qualifying homeowners. The purpose of this grant is to offset the burden of school taxes for residential properties. It is often the case that the homeowner grant exceeds school taxes and is applied to reduce local or municipal property taxes. Homeowner grants have been provided in British Columbia since 1957. The grant amount is set by the provincial government.

During 1974 and 1975, a second grant was made available to provincial homeowners. The School Tax Removal and Resources Grant was set in 1974 at 20 percent of the difference between the school tax and the homeowner grant with a minimum of $30 and a maximum of $40.

Those residents whose homeowner grant covered all school taxes were, for example, eligible for a cash grant of $30. In 1975, this grant was increased to 40 percent of the difference between school taxes and the homeowner grant, with the minimum remaining at $30 and the maximum raised to $80. This supplementary grant was discontinued in 1976 but the homeowner grant was raised to $280 in that year.

. . . /5

2. RAPID GROWTH IN EXPENDITURES AND REVENUES - PRE-1976

In 1970 and 1971 a political perception emerged that levels of service in the B.C. public education system were not adequate. This view was supported by a growing public perception of declining educational standards in schools, some blaming the discontinuation of provincial examinations and the de-emphasis by the Ministry of its centralized curriculum prescription.

In 1974, the Government announced a policy to increase expenditures on education, and in particular, to reduce "class size" as the method of improving service. "Class size" proved very difficult to define accurately, partly because not all educational programs were delivered in "classes", making consistent measurement between school districts difficult to achieve. Further "class size" did not reflect the growing numbers of professional teachers who supplied supportive, coordinative or supervisory services. Therefore the "pupil-teacher ratio" was used to identify the ratio of the number of pupils in the district to the number of professionally certified teachers on staff, regardless of their assignments.

The Government also eliminated the capital and operating referenda which had made it difficult for boards to do rational long-range planning and which had potentially hindered boards' autonomy in such matters as increasing levels of service.

There was no program-related budget or statement of basic levels of service available to the system. Therefore, the Government escalated the growth in grants to enable boards to increase levels of service. This was permissable because the tax room created by increased grants was retained by school boards and, together with the increased grants, was used to expand expenditures. These decisions, placed on top of the existing finance system, had large consequences for the levels of expenditure on public education. However, because property assessment practices throughout B.C. were not uniform, the consequences of the decisions upon tax rates were obscured, and taxpayers during these years did not raise loud objections to the increases.

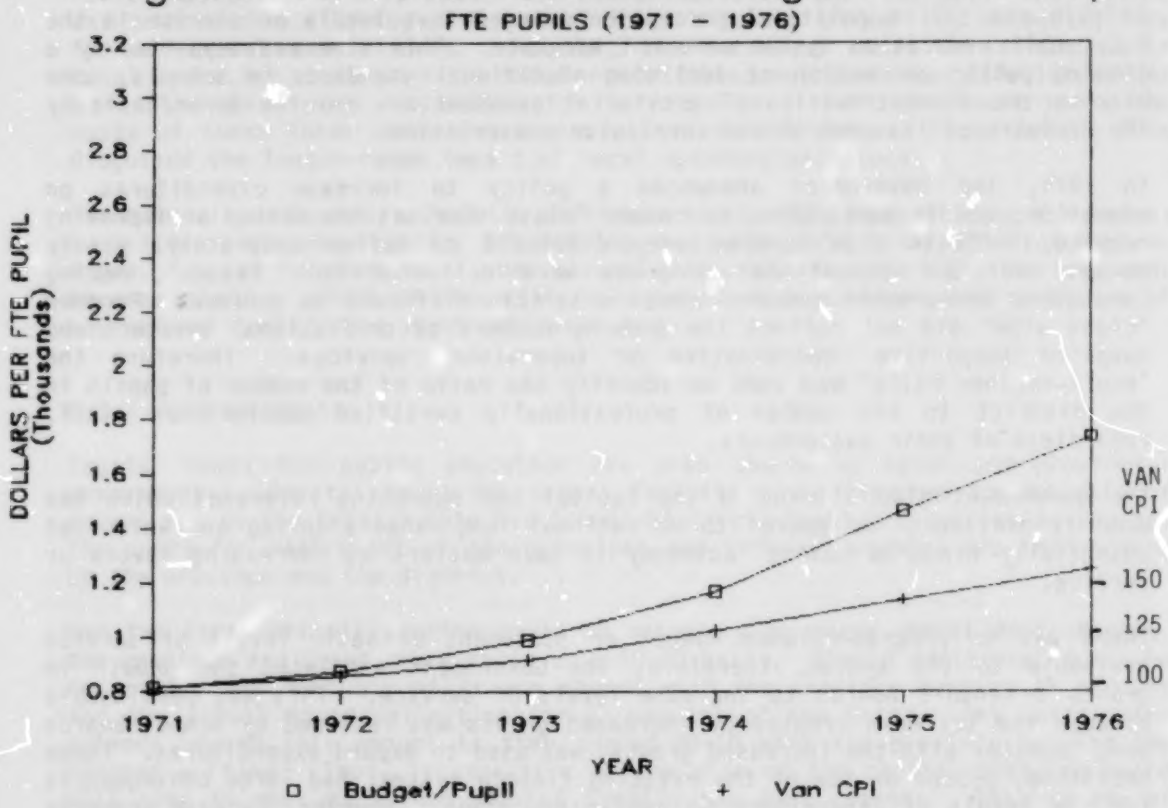
Figure 1 shows that during the period 1971 - 1976, total gross budgets per pupil increased more rapidly than did the Consumer Price Index. Figure 2 shows the financial impact of the decision to allow increased expenditures in the system.

Total Gross Budgets grew by 120.6% ($498.0 million) in the period 1971 - 1976. This resulted in rapid growth in both gross property taxation requirements ($210.8 to $483.2 million) and in the Provincial grants ($179.3 million to $387.5 million). Provincial Homeowner Grants were used to reduce net property tax requirements during this period. Had per pupil budgets simply kept pace with inflation, the 1976 budgets would have been $634.6 million, a reduction of $276.3 million or 30.3% less than actual 1976 budgets.

The full amount of expenditures for public education was not widely known until 1983, because until that time many components of expenditure were not shown in commonly used reports of educational expenditures. The gross total budgets include gross debt service, gross non-shareable operating, gross non-shareable capital, the Teachers Pension Fund and miscellaneous revenues applied to operating as well as the net shareable operating budgets. The latter item is a more frequently used measure of school expenditures.

. . . /6

Figure 1. Total Gross Budgets Per Pupil



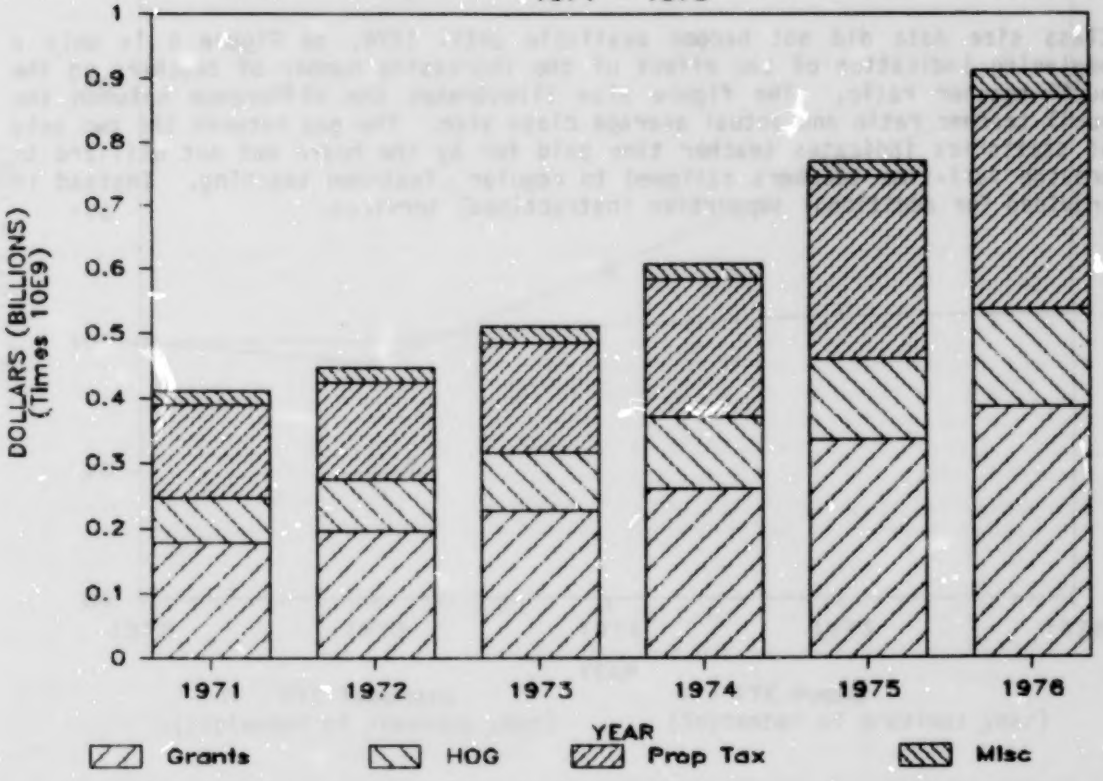
NOTE:

1. Budget per pupil = Calendar Year Total Gross Budget/FTE Pupils in September of previous year. 1971 = $813/pupil 1976 =$1,734/pupil

2. Vancouver CPI: 1971 = 100 1976 = 153.7

Figure 2. Total Gross Budgets

1971 - 1976



NOTE:

1. Provincial grants include the Teachers' Pension Fund, grants to non-shareable operating accounts (less Post-Secondary allocations) and the provincial share of Debt Service, but excludes the Home Owner Grant.

2. Home Owner Grant includes amounts paid by the Ministries of Education and Municipal Affairs when applicable. The School Tax Removal Grant (1974 & 1975) is included in the HOG.

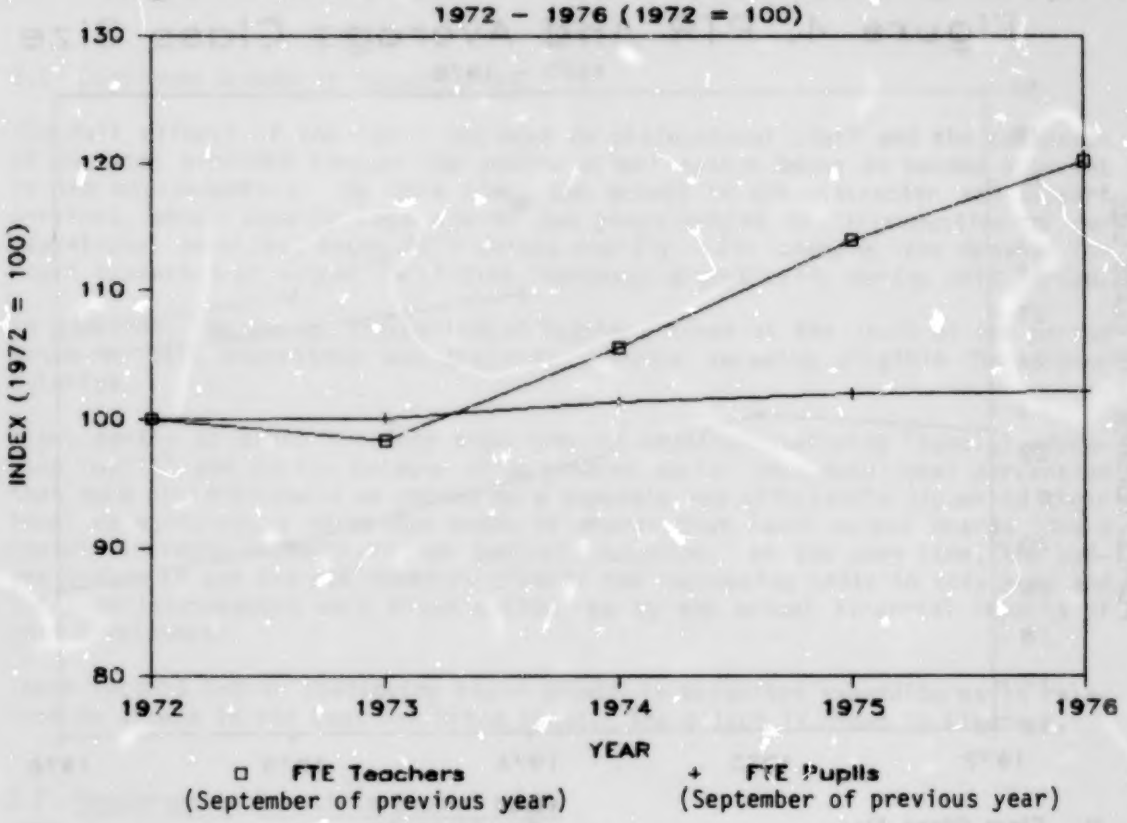
3. Total budgets: 1971 = $412.9 million 1976 = $910.9 million

Figure 3 shows that increased spending was accompanied by increasing numbers of teachers relative to the number of pupils. If the relationship between the number of teachers and the number of pupils had remained as it was in 1972, there would have been 4,116 fewer teachers in the system in 1976.

Class size data did not become available until 1974, so Figure 4 is only a beginning indication of the effect of the increasing number of teachers on the pupil-teacher ratio. The figure also illustrates the difference between the pupil-teacher ratio and actual average class size. The gap between the two sets of statistics indicates teacher time paid for by the board but not utilized to provide full-time teachers assigned to regular classroom teaching. Instead it provided for additional supportive instructional services.

. . . /9

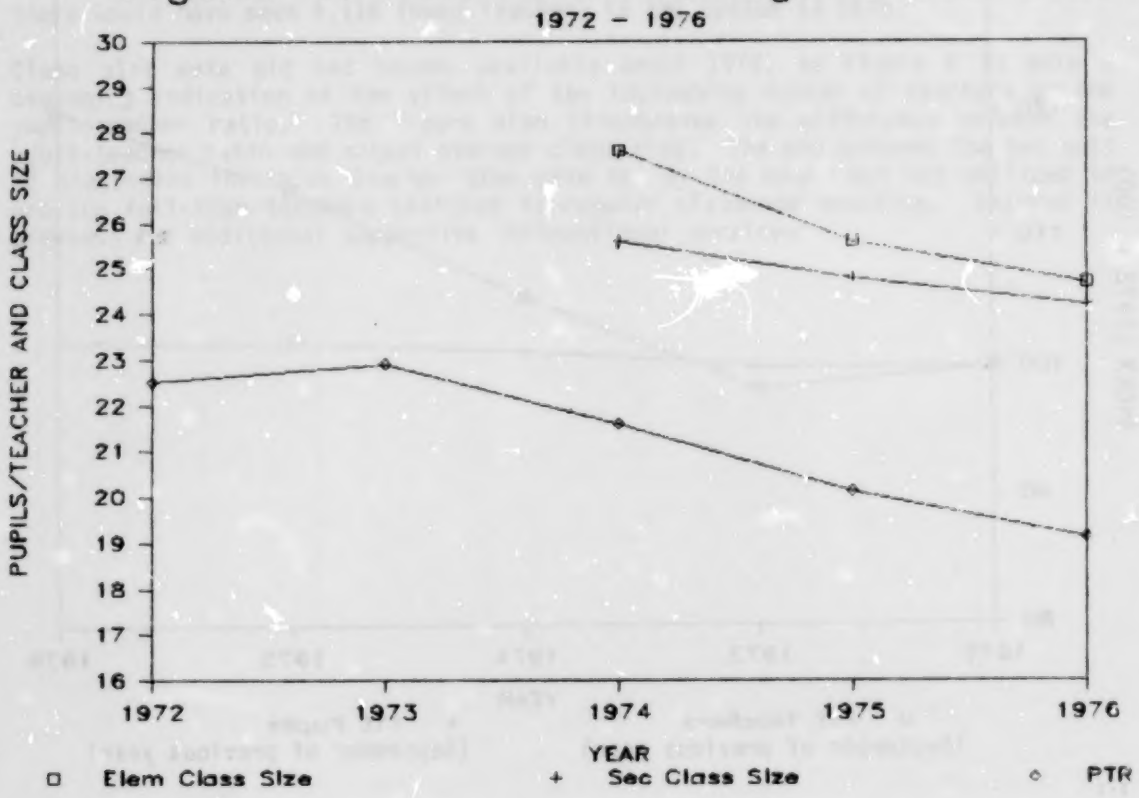
Figure 3. Index: FTE Teachers & Pupils



NOTE:

1. FTE Teachers: 1972 = 22,839 1976 = 27,455
   FTE Pupils: 1972 = 514,217 1976 = 525,344

Figure 4. PTR And Average Class Size



NOTE:

1. Class sizes and number of teachers & pupils are as at September of the previous year.

2. Class size data not available 1972 and 1973

Elementary	1974 = 27.6	1976 = 24.7
Secondary	1974 = 25.6	1976 = 24.2

3. Pupil/Teacher Ratio: 1972 = 22.51 1976 = 19.14

3. RESPONSE TO RAPID EXPENDITURE GROWTH (1976 - 1981)

3.1 Continued Growth in Expenditures

The full effects of the rapid increase in professional staff and the expansion of services provided through the public school system began to become apparent in the mid-seventies. By this time, the growth in administrative and support services, which usually lags one or two years behind the introduction of new educational services, began to escalate rapidly. For example, the demands for rapid expansion of school facilities increased dramatically during this period.

In addition, the young, inexperienced teachers hired at the start of the period began to gain experience and training, thereby becoming eligible for higher salaries.

Also, partly to avoid the very high cost of institutionalizing "special education pupils" and partly because of a growing social and educational perception that such children could be served more humanely and efficiently closer to their local communities, a consensus began to emerge that local school boards should rapidly increase expenditures on special education. At the same time, the budget system in use did not identify clearly the increasing costs in this area and local decision-makers were often unclear as to the actual financial impacts of this development.

These factors led to continuing rapid growth in budgetted expenditures in relation to growth in the Consumer Price Index. The effect is shown in Figure 5.

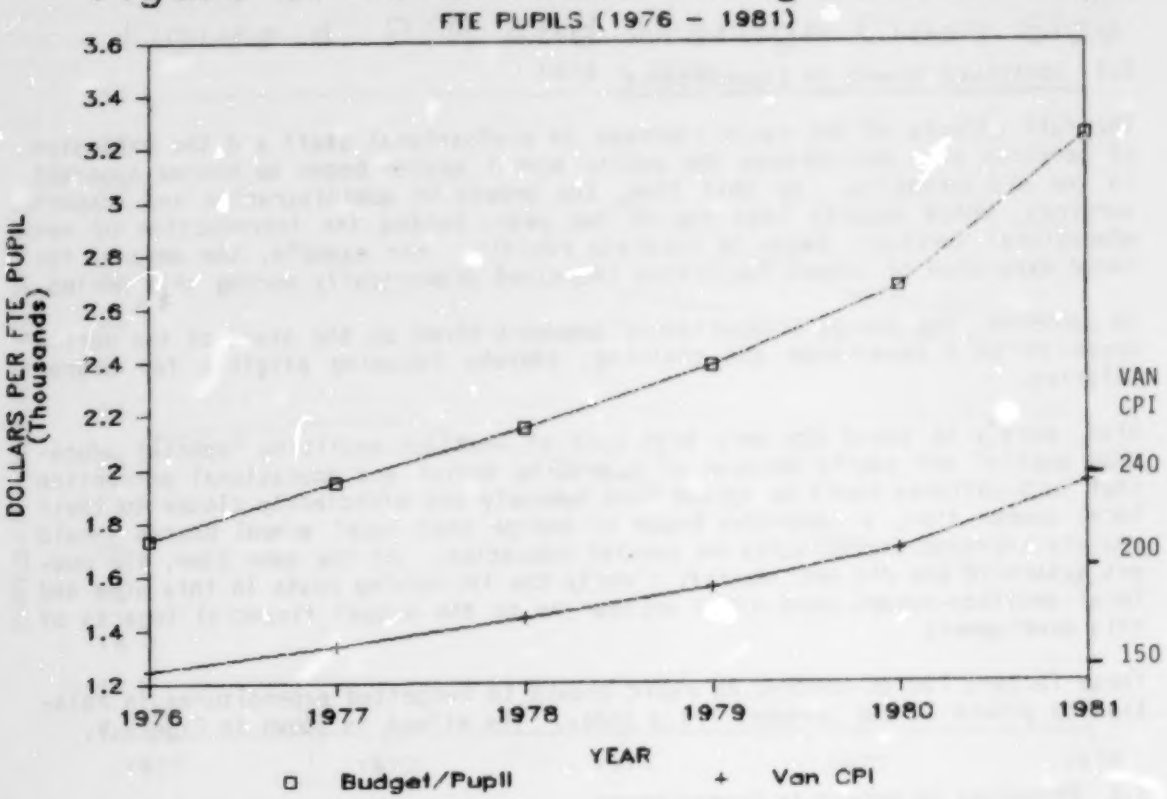
3.2 Responses to Growth in Expenditures

Concern about increased levels of public spending became manifest by the mid 1970's. At the Federal level the introduction of the Anti-Inflation Board, including its attendant attempts at controlling wages, was one example. Another, more relevant to the province, was breaking of the link between Provincial expenditures on programs such as health and education, and Federal contributions to the provinces through the Established Programs Financing Agreements. This severance enabled the Federal government to set contributions to EPF independently of provincial expenditure levels. Thus, ceilings on the growth of federal contributions to the EPF Program were arbitrarily imposed, regardless of levels of Provincial expenditure.

3.2.1 Rate of Growth in Grants

In a similar fashion, the rate of growth in school board budgets outstripped the ability of the province to increase its contributions to school board budgets from general revenue. The province attempted to persuade boards to restrict growth in expenditures by slowing the annual rate of increase in grants. At the same time boards were faced with externally-driven increases in costs, salary increases arose through the salary bargaining and arbitration processes, and continuing pressure to broaden and expand local programs. The impact of these increases was passed on to the local taxpayer. The effect is shown in Figure 6.

Figure 5. Total Gross Budgets Per Pupil



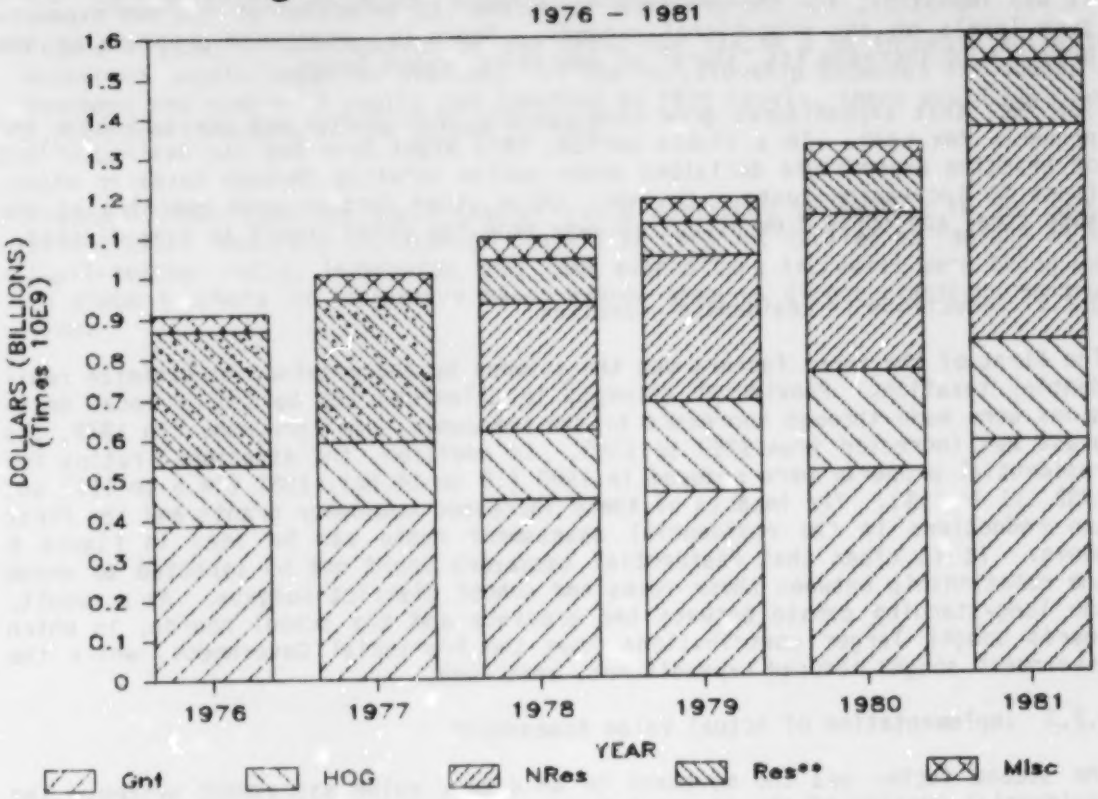
NOTE:

1. Budget/Pupil = Calendar Year Total Gross Budget/FTE Pupils in September of previous year. 1976 = $1,734 1981 = $3,246

2. Vancouver CPI: 1971 = 100 1976 = 153.7 1981 = 238.9

Figure 6. Total Gross Budgets

1976 – 1981



NOTE:

1. Provincial Grants includes the Teachers' Pension Fund, grants to non-shareable operating accounts(less Post-Secondary allocations) and the provincial share of debt service, but excludes the Home Owner Grant.

2. Home Owner Grant includes amounts paid by both the Ministries of Education and Municipal Affairs in applicable years. Revenue Surplus Appropriation (Ministries of Education and Municipal Affairs) included in 1979 total HOG.

3. Total budgets: 1976 = $910.9 million 1981 = $1,597.3 million

**Prior to 1978, Residential and Non-Residential Taxation cannot be separated and the combined amount is shown as

In the absence of a good educational definition for the Basic Education Program, it was impossible for the province to defend its selection of its own expenditure levels on any educational grounds. There was continued pressure on the province to increase its "share" of education expenditures.

The fact that expenditures grew more rapidly than grants put pressure onto the property tax base. In a stable period, this might have had the desired effect of bringing expenditure decisions under public scrutiny through taxpayer objections to increasing costs. However, three other factors were emerging at the same time, and these drew attention away from the rapid growth in expenditures.

3.2.2 Reductions in Residential Taxation

The first of the three factors was the attempt by the province to minimize residential taxation. Provincial attempts to alleviate the burden of local decisions were made through increases to the homeowner grant program. In 1979, the grant was increased from $280 to $380. In addition, the assessment ratios for residential property were reduced in 1980 (15 to 14.5%), 1981 (14.5 to 11%) and 1982 (11 to 10%). The impacts of these increased homeowner grants and the first two reductions in the residential assessment ratio can be seen in Figure 6 above. It is clear that residential taxpayers could not be expected to sense the relationship between their taxes and school district budgets. As a result, the long-standing debate between the province and the school boards, in which boards sought larger contributions from the Provincial Government, while the government sought reduced expenditures, continued.

3.2.3 Implementation of Actual Value Assessment

The second factor was the movement to an actual value assessment system. The residential portion of the change (which represented the largest and most vocal segment of taxpayers) was phased-in over a three year period from 1978 to 1980. Increases in taxation could be explained as being caused by increases in assessed value, or by the Province's failure to show more rapid growth in provincial grants. This drew attention away from increased expenditures.

3.2.4 Rapid Growth in Assessed Values

Third, in some areas of the province the issue became even more confused by a very rapid growth in residential assessed values during 1979, 1980 and 1981.

The effect of increases in assessed value was twofold. They caused boards in districts where property values were increasing rapidly to collect more tax through the Basic Education Program (which relied on a basic tax levy across the province). They also hid the tax consequences of expenditure increases, since public perceptions of the reasons for tax increases tended to be directed only to the assessment and tax system rather than to include board decisions to increase expenditures.

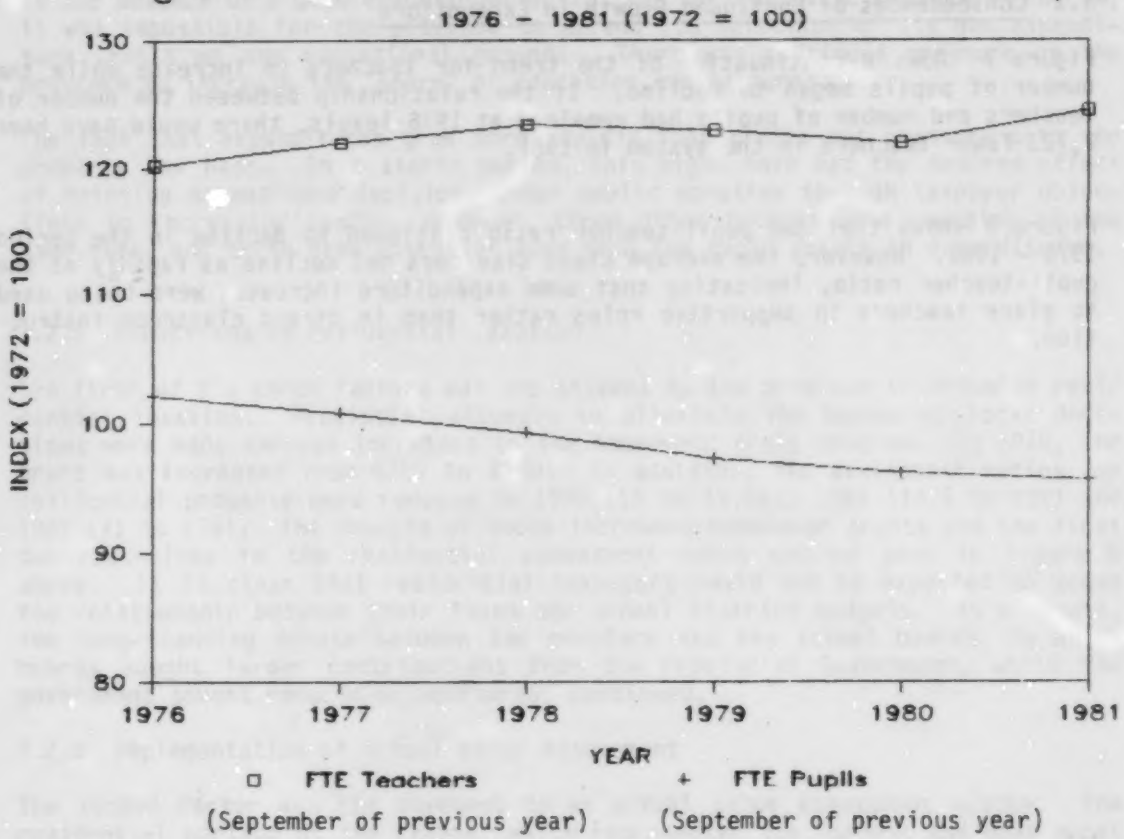
. . . /15

3.3 Consequences of Continued Growth in Expenditure

Figure 7 shows a continuation of the trend for teachers to increase while the number of pupils began to decline. If the relationship betweeen the number of teachers and number of pupils had remained at 1976 levels, there would have been 2,723 fewer teachers in the system in 1981.

Figure 8 shows that the pupil-teacher ratio continued to decline in the period 1976 - 1981. However, the average class size does not decline as rapidly as the pupil-teacher ratio, indicating that some expenditure increases were being used to place teachers in supportive roles rather than in direct classroom instruction.

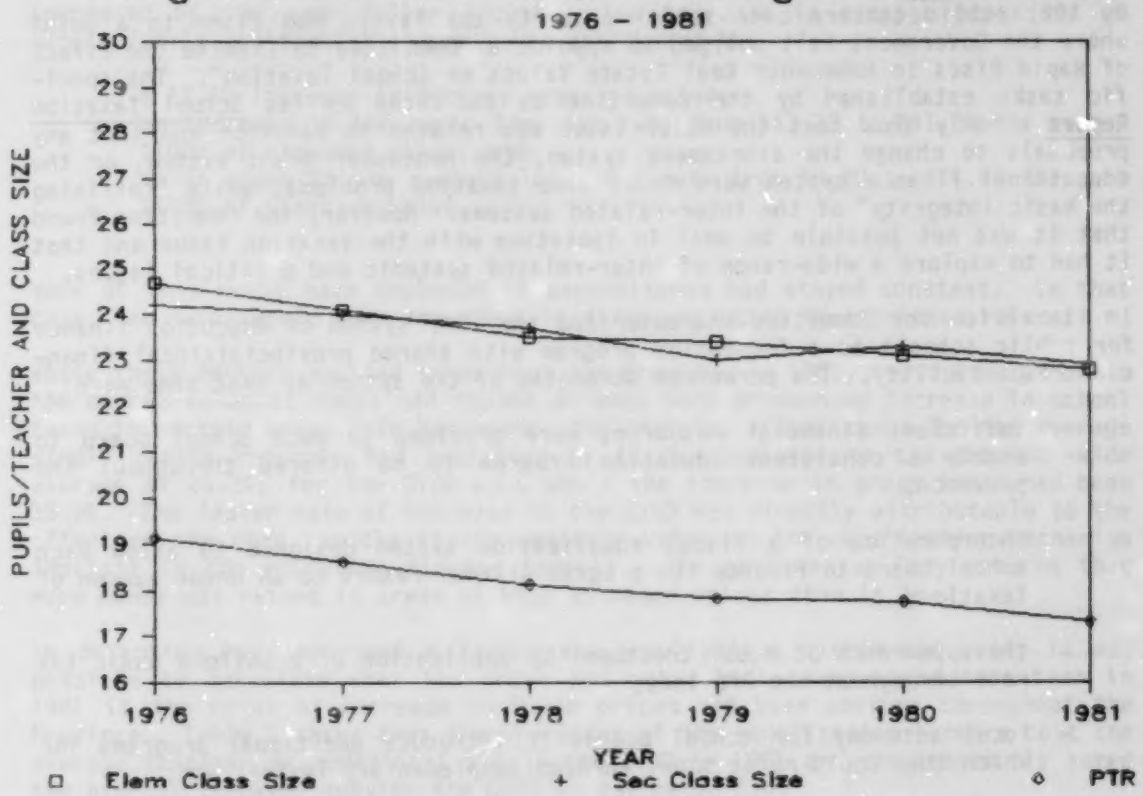
Figure 7. Index: FTE Teachers & Pupils



NOTE:

FTE Teachers:	1976 = 27,455	1981 = 28,438
FTE Pupils:	1976 = 525,344	1981 = 492,054

Figure 8. PTR And Average Class Size



NOTE:

1. Class sizes and number of teachers & pupils are as at September of the previous year.

2. Elementary Class Size: 1976 = 24.7 1981 = 22.8
   Secondary Class Size: 1976 = 24.2 1981 = 22.9
   Pupil/Teacher Ratio: 1976 = 19.14 1981 = 17.3

4. MAJOR REVIEW OF FINANCING SYSTEMS (1981)

By 1981 public concern over school property tax levels had risen to a point where the Government felt obliged to appoint a "Committee to Examine the Effect of Rapid Rises in Homeowner Real Estate Values on School Taxation". The specific tasks established by the Committee as indicated in its School Taxation Report clearly show that the major issue was related to taxation and that any proposals to change the assessment system, the homeowner grant system, or the educational finance system were to resolve taxation problems, while "retaining the basic integrity" of the inter-related systems. However, the Committee found that it was not possible to deal in isolation with the taxation issue and that it had to explore a wide-range of inter-related systemic and political issues.

In its review the Committee characterized the 1981 system of education finance for public schools as a foundation program with shared provincial/local financial responsibility. The perceived strengths of the system at that time were:

- sufficient financial resources were provided to each school board to enable a consistent education program to be offered throughout the province;
- incorporation of a fiscal equalization system designed to allow each school board to finance its program without resort to an undue burden of taxation;
- the appearance of equal treatment by application of a uniform basic tax rate throughout the Province;
- local autonomy for school boards to introduce additional programs for which they could raise money through supplementary levies; and,
- direct provincial support through the homeowner grant to reduce the property tax burden to homeowners, particularly those least able to pay property taxes.

In spite of these strong characteristics the system was coming under considerable criticism in 1981.

4.1 1981 School Taxes

School taxes increased in all areas of the Province in 1981 for the following reasons:

- School budgets increased by 19%, on average, over 1980.
- Allowable costs in the Basic Education Program increased by 12.1%, well below the increase in school board operating budgets.
- The Province increased its grants to school boards by 10%, but because the Basic Education Program had increased 12.1%, the provincial share of funding of the Basic Education Program decreased from 39.7% to 37.5% and pressure was placed on the property tax base.

. . . /19

For these reasons, gross school taxes paid by the average single family residential property in the Province increased by an estimated 25.4%, from $413 to $518. Because there was no increase in the homeowner grant, net school taxes increased by the same dollar amount. The increase in average gross tax on single family residential property was attributed to:

- a 12.4% increase in average assessed value;
- an increase in the basic levy tax rate from $41.25 to $41.80 for each $1000 of assessed value; and;
- an increase in the average local tax rate from $9.20 to $14.40 for each $1000 of assessed value.

None of this would have happened if expenditures had stayed constant. In that case, tax rates would have come down in direct relation to increased values.

While these factors applied throughout the Province in 1981, rapid escalation in the market value of homes had caused an even more pronounced increase in school taxes in certain areas. In Vancouver, for example, school taxes for the average single family property had increased by 40.3%, compared to the province-wide average of 25.3%; for the GVRD as a whole the increase in gross taxes had been 35.0%. The faster rate of increase in the GVRD was directly attributable to the effect of the more rapidly rising property value on the equalization mechanism implicit in the education finance formula. The uniform tax levy ensured that more money was raised in areas of high assessed values than in low.

To determine how important a factor the equalization system had been, it was possible to calculate what the gross and net school taxes would have been in 1981 if the rates of increase in house prices had been uniform throughout the Province. Table 1 shows that the operation of the equalization formula cost the average taxpayer an additional $46 in the GVRD in 1981 and simultaneously saved the average taxpayer outside the GVRD an estimated $36.

TABLE 1: ACTUAL HOMEOWNER TAXES COMPARED WITH HYPOTHETICAL TAXES BASED ON UNIFORM INCREASES IN ASSESSED VALUES (1981)

	Actual $	Hypothetical* $	Difference $
GVRD			
- Average Gross School Tax	673	627	(46)
- Average Net School Tax	293	247	(46)
Other Areas			
- Average Gross School Tax	395	431	36
- Average Net School Tax	15	51	36
Province			
- Average Gross School Tax	518	518	--
- Average Net School Tax	138	138	--

* Assumes same percentage increase in home values in the GVRD as the provincial average percentage increase.

. . . /20

Table 2 illustrates how the various factors contributed to the increase in school taxes in the GVRD and in other areas in 1981. It is obvious from the table that rapid increases in school taxes would have occurred in 1981 even if the Province had maintained its share of funding and home values had increased at a uniform rate. However, the operation of the equalization system was the clear cause of the wide differences in school tax increases across the Province.

TABLE 2: SOURCES OF 1981 SCHOOL TAX INCREASES FOR THE AVERAGE SINGLE FAMILY RESIDENCE

	Source			
	Total Tax Increase	Increases Caused by School Board Decisions *	Increases Caused by Provincial Decisions **	Increases resulting from the Operation of Equalization
GVRD	$175	$91	$38	$ 46
Other Areas	46	61	21	(36)
Province	104	75	29	--

* This represented the tax increase caused by the amount by which the budget set by the school boards exceeded what the Basic Education Program would have raised if it had grown at the same percentage rate as overall budgets.

** In 1980 Provincial grants to the Basic Education Program financed 32.25% of operating budgets. The figures in this column were generated by calculating the tax rate that could have been instituted in 1981 had Provincial grants been kept at the 1980 percentage. (Note that this calculation understates the Provincial contribution because it does not take into account the Provincial Government's contribution to capital expenditures and the Teachers' Pension Fund.)

The first three columns of Table 3 (pages 21 & 22) enable a district by district comparison of the net tax on the average single family property in 1980 with the corresponding 1981 tax. The average increase in net taxes (taxes after the homeowner grant) was $104. As mentioned, earlier, this was slightly more than a 25% increase in gross school taxes, but it was a 273.6% increase in net taxes -- the increase which the homeowner would actually notice on his tax bill. It is no wonder that homeowners were upset with the tax increases which occurred in 1981.

. . . /21

TABLE 3: NET SCHOOL TAXES PAID ON THE AVERAGE SINGLE FAMILY PROPERTY BY SCHOOL DISTRICT (1980 - 1983) **

SCHOOL DISTRICT	1980	1981	$ Change 80 - 81	1982	$ Change 81 - 82	1983	$ Change 82 - 83
01 FERNIE	-55	5	60	-71	-76	-105	-34
02 CRANBROOK	-22	10	32	-80	-90	-93	-13
03 KIMBERLY	-114	-96	18	1	97	-8	-8
04 WINDERMERE	-34	12	46	60	48	28	-33
07 NELSON	-102	-75	27	3	78	-6	-10
09 CASTLEGAR	-39	-37	2	-30	7	-40	-10
10 ARROW LAKES	-170	-148	22	-83	65	-87	-4
11 TRAIL	-105	-96	9	-33	63	-44	-11
12 GRAND FORKS	-46	-69	-23	-66	3	-70	-5
13 KETTLE VALLEY	-175	-157	18	-41	116	-55	-13
14 SOUTH OKANAGAN	-1	39	40	50	11	38	-12
15 PENTICTON	-49	-21	28	-17	4	-27	-10
16 KEREMEOS	-201	-164	37	-85	79	-89	-4
17 PRINCETON	-201	-194	7	-167	27	-172	-5
18 GOLDEN	-84	-70	14	-112	-42	-123	-11
19 REVELSTOKE	-28	-48	-20	-86	-38	-93	-7
21 ARMSTRONG	-52	-33	19	-91	-58	-101	-10
22 VERNON	-32	8	40	19	11	1	-18
23 CENT. OKANAGAN	-6	109	115	90	-19	58	-32
24 KAMLOOPS	-17	4	21	-22	-26	-39	-17
26 NORTH THOMPSON	-134	-138	-4	-97	41	-109	-12
27 CARIBOO-CHILCOT	-129	-120	9	-131	-11	-138	-7
28 QUESNEL	-96	-110	-14	-89	21	-97	-8
29 LILLOOET	-202	-186	16	-55	131	-69	-14
30 SOUTH CARIBOO	-191	-182	9	-107	75	-125	-17
31 MERRITT	-182	-168	14	-226	-58	-233	-8
32 HOPE	-166	-151	15	-59	92	-72	-13
33 CHILLIWACK	-111	-82	29	-110	-28	-121	-10
34 ABBOTSFORD	-62	-28	34	-29	-1	-55	-26
35 LANGLEY	38	111	73	70	-41	48	-22
36 SURREY	14	195	181	152	-43	132	-20
37 DELTA	96	222	126	51	-171	46	-5
38 RICHMOND	121	296	175	328	32	278	-51
39 VANCOUVER	113	312	199	180	-132	148	-32
40 NEW WESTMINSTER	36	126	90	104	-22	47	-56
BURNABY	131	260	129	217	-43	183	-34
42 MAPLE RIDGE	86	195	109	144	-51	117	-27
43 COQUITLAM	90	197	107	125	-72	107	-17

TABLE 3: NET SCHOOL TAXES PAID ON THE AVERAGE SINGLE FAMILY PROPERTY BY SCHOOL DISTRICT (1980 - 1983) CONTINUED**

SCHOOL DISTRICT	1980	1981	$ Change 80 - 81	1982	$ Change 81 - 82	1983	$ Change 82 - 83
44 NORTH VANCOUVER	223	443	220	403	-40	311	-92
45 WEST VANCOUVER	482	819	337	247	-572	187	-60
46 SUNSHINE COAST	-45	1	46	4	3	-1	-4
47 POWELL RIVER	-111	-98	13	-25	73	-33	-8
48 HOWE SOUND	8	69	62	138	69	106	-32
49 CENTRAL COAST	-184	-227	-43	-108	119	-107	1
50 QUEEN CHARLOTTE	218	93	-125	7	-86	-9	-16
52 PRINCE RUPERT	5	1	-4	-122	-123	-140	-18
54 SMITHERS	-105	-80	25	-184	-104	-194	-10
55 BURNS LAKE	-192	-176	16	-123	53	-135	-12
56 NECHAKO	-118	-106	12	-123	-17	-133	-10
57 PRINCE GEORGE	-14	14	28	-50	-64	-56	-5
59 PEACE RIVER S.	-105	-83	22	-98	-15	-111	-13
60 PEACE RIVER N.	-43	-24	19	-78	-54	-77	1
61 GR. VICTORIA	60	204	144	145	-59	130	-14
62 SOOKE	-7	98	105	26	-72	21	-5
63 SAANICH	109	203	94	211	8	189	-22
64 GULF ISLANDS	-58	8	66	-81	-89	-81	0
65 COWICHAN	-53	-33	20	54	87	34	-20
66 LAKE COWICHAN	-85	-101	-16	21	122	7	-15
68 NANAIMO	-22	5	27	15	10	4	-11
69 QUALICUM	2	92	90	60	-32	59	-1
70 ALBERNI	-79	-74	5	-89	-15	-92	-3
71 COURTENAY	-84	-33	51	-25	8	-32	-7
72 CAMPBELL RIVER	-3	20	23	74	54	58	-16
75 MISSION	-118	-73	45	-81	-8	-81	0
76 AGASSIZ-HARRISN	-126	-155	-29	19	174	0	-20
77 SUMMERLAND	76	38	-38	61	23	36	-25
80 KITIMAT	-38	-23	15	40	63	13	-26
81 FORT NELSON	49	-6	-55	-75	-69	-76	-1
84 VANC. ISLAND W.	-82	-82	0	-73	9	-61	13
85 VANC. ISLAND N.	52	45	-7	42	-3	37	-5
86 CRESTON	-88	-45	43	-4	41	-13	-9
87 STIKINE	-271	-254	17	-129	125	-123	5
88 TERRACE	-139	-119	20	-205	-86	-213	-9
89 SHUSWAP	-83	-30	53	-4	26	-24	-21
92 NISGHA	-175	-182	-7	-132	50	-135	-3
AVERAGE NET TAX	34	138		81		58	
AVERAGE CHANGE			104		-57		-24
STANDARD DEVIATION	116	165	49	117	-48	106	-11

** Net taxes are taxes paid after application of the Home Owner Grant.

Source: 1981 = Taxation Report, 1980 = Calculated based on data in the Taxation Report, 1982 & 1983 = Finance Research.

The range of taxes is shown in the Table through the use of the standard deviation. In 1980, one standard deviation in taxes paid on the average home equals $116. In 1981, it increased to $165. The range of net taxes paid by average homeowners was increasing and the changes in school taxes were not occurring uniformly throughout the province. By 1981 net school taxes for the owner of an average home in the Greater Vancouver Regional District was $293, while in the rest of the Province it was $15.

Because of these variations, the use of mill or tax rates to demonstrate how taxes were changing was seen to be inappropriate. As a result, all tax analyses done by the Ministry since 1981 use actual tax to be paid (net tax) in its examination of tax equity.

4.2 Criticisms of the Pre-1982 Financing System

The 1981 experience with school taxes led to a strong reiteration of a number of criticisms of the then existing education finance system. These criticisms were:

1. The system relied too heavily upon property taxation as a source of financing. Property taxation is considered to be a far less equitable form of taxation than other sources but is the only tax source directly available to local government. It had been widely recommended that the Provincial Government finance a greater proportion of public school education.

2. The equalization system implicit in the system used the assessment base of each school district as a measure of that district's fiscal capacity. It was believed that other measures of fiscal capacity would show that tax bases across the Province are more uniform than suggested by the assessment base. With an actual value assessment system and wide differences in real estate patterns across the Province, use of the assessment base as a basis for determining provincial grants had come under increasing criticism.

3. The system was so complicated that taxpayers were not able to easily identify the cause of tax increases. There was not a simple relationship between increases in a school board's budget and school tax increases in that district. Changes in the percentage contribution of the Provincial Government and the workings of the equalization system confused the issue, as we have seen above. For example, in many non-GVRD areas in 1981 school taxes for the "average" single family property increased very slowly even though school board budgets had increased by almost 20% in many instances.

4. The definition of the Basic Education Program had no education content but was simply a financial formula based on school board operating expenditures for the previous year. In simplified terms the Basic Education Program was the cost of delivering public school education in the previous year. The label "Basic Education Program" was therefore somewhat of a misnomer, although the method of calculation had some benefits. By defining the basic program in this way some pressure was put on school boards to control annual cost increases. However, local operating costs in excess of basic

. . . /24

program costs did not reflect the cost of providing educational services above and beyond a "core" educational program. As a result, the education responsibilities of each school board and financial accountability for program costs were unclear. The effects of local decisions on resulting taxes were disguised and not easily understood.

5. The homeowner grant was intended by the Provincial Government to be a contribution to education by reducing residential taxes and transferring the cost to the Province. However, because of the complex mechanism for its application toward taxes, the effects of the grant as a funding mechanism were not easy to perceive. In fact, the grant allowed boards to increase expenditures with limited impact on taxes.

6. The amount of non-residential assessed values varied tremendously from district to district. Once the provincially determined basic levy was set, the remaining tax room for education became the exclusive domain of local boards. This enabled some boards to raise funds far in excess of the Basic Education Program with little tax effort and little likelihood of protest from their electorates. Other boards with a small non-residential tax base had to raise funds largely from the residential tax base. They argued that this kept them perpetually behind in their ability to deliver educational services.

. . . /25

5. TAX REFORM AND RESTRAINT (1981 - 1982)

In assessing the problems of education finance late in 1981 and early in 1982 the Provincial Government concluded that the existing situation was politically and financially intolerable and that major reform was required in order to address criticisms throughout the Province. The Ministry and the Government were under growing public pressure from all sectors to amend various systems and practices. Opinions as to the required corrective measures came from all sectors and were often contradictory. By late 1981, it had become clear that the three major systems; taxation, funding, and budgeting; would require examination and revision.

Major improvements in the situation would require a number of large-scale revisions. The responsibility for decisions about taxation on various sectors would have to be amended and clarified. The distribution of tax resources would need change to improve equity and to demonstrate the already existing and appropriate role of the Province as the major funder of the system. The budgeting system needed re-design to provide essential basic information about expenditures. Further, the provincial government's emerging policy goal of reducing the growth of the public sector in reaction to rapidly declining resource revenues could not be easily addressed in the confused educational environment.

In the next sections of this paper, a number of major developments are described that caused considerable but unavoidable disruption in planning at both provincial and local levels. In spite of the temporary confusion, the developments laid the ground work that enabled the education system to respond in an organized way to the Provincial Government goal.

5.1 RESTRAINT I - March, 1982

The problems of rapidly increasing public expenditures were not restricted to the education system. Whatever the specific reasons that lay behind the emergence of the funding crisis, the government felt compelled to intervene to stop the rapid escalation of expenditure in the public sector. By early spring, 1982, the first steps to be taken in the form of control of growth in government spending were announced. We now call these "Restraint I". For education, all three parts of the finance system were affected by the announcement.

5.1.1 The Funding System

The province announced a new system of distributing grants to school boards. The system called for the government to pay a fixed percentage of each board's budget, regardless of the wealth of the district. The province then shared in a portion of the budget in proportion to each district's wealth as measured by residential assessed value per pupil. Finally, local taxpayers were to pay the remainder.

. . . /26

This reduced the range in what had been called the "provincial share" of school board expenditures. Boards could no longer make the statement that the province was making no financial contribution to the district. The equalization system no longer forced local residential taxpayers to subsidize expenditures of other boards. The change eliminated the basic levy which boards had called an arbitrary provincial tax that forced their taxpayers to pay the amount of the levy whether or not the full amount of the levy was required.

The Boards could no longer call the funds raised by the basic levy "a local contribution to the costs of education" while blaming the Province for setting a basic levy which increased taxes. In fact, the basic levy had been a provincial tax on both residential and non-residential taxpayers. The proceeds of the levy would more properly have been labelled as part of the responsibility of the Province for school board funding. If this had been understood, then there would have been a much clearer discussion about how the province could increase its share of school board expenditures without massive increases in other taxes.

5.1.2 The Budget System

It was recognized that steps taken to revise the tax and funding system would not succeed if steps were not also taken to alter the budget system. To this end, the March, 1982 announcement of restraint included control over school board budgets. The boards were required to re-submit their 1982 budgets at a level which equalled 3/4 of the budget as submitted in February plus 1/4 of the 1981 budget incremented by 12%.

The intention behind the calculation was to permit boards to complete the 1981/82 school year at expenditure levels to which they were already committed, but to force them to plan for the remainder of 1982 at 1981 levels plus 12%. The 12% increase for the last quarter of 1982 was a dramatic reduction from the 18% originally planned by the boards. This was a relatively crude, but effective device for bringing budgets under financial, if not educational, control.

5.1.3 The Taxation System

The major inequities in the distribution of school tax resources from the non-residential sector were investigated. There seemed little rationale behind the notion that the generally accidental distribution of these values on the tax rolls of some districts should remain the "private" domain of the local school board and be inaccessible to the general system. In a few districts with very large non-residential tax bases, the province made no tax contribution to school district expenditures while in others, with little non-residential tax base, the province paid virtually the whole bill. This situation contradicted the historic notion that the province and local school boards were co-managers in the system and shared equitably the problem of developing the financial resources to pay for educational expenditures.

. . . /27

To remedy this anomaly, the provincial government decided to announce a new system of determining the tax base for each school district. The local school board tax base was defined to be the residential tax base only. The non-residential portion of the base was defined as a provincial resource for taxation related to operating expenditures. However, it remained as resource to the local school district for taxation related to capital expenditures. In theory, the province would establish the tax rate for non-residential property at a uniform level in all districts and the local school board would establish the residential tax rate required by the remainder of the funding requirement after external revenues and provincial grants were known.

In fact, because the change was coupled with the temporary removal of school boards' ability to set budgets as high as they might like, the province during the period of restraint actually determines the residential tax rate in each district through the operation of the disbursement formula. This provincial restraint is scheduled to terminate in December, 1986 leading to the assumption that school boards will assume responsibility for the specific residential tax rates thereafter.

The effect of this aspect of restraint can also be seen in Table 3 in the comparison between 1982 and 1981 taxes. Average net taxes came down $57, and did so in such a way as to reduce the inequities which had become so large in 1981.

This change did not establish an entirely new process of provincial control. The province had always controlled a significant portion of both residential and non-residential property taxation through the basic levy system. It chose now to directly control all non-residential taxation, be responsible for the tax rates on such property, and distribute the proceeds equitably. This was intended to clarify the distinction between local and provincial responsibilities.

5.1.4 Compensation Stabilization

To assist implementation of restraint, the government had already announced in February 1982 impositions of controls over public sector salaries. These controls covered teachers and other school personnel.

The originial restraint program announced in February continued wage guidelines of 8 - 14%. Awards at the higher figure could be attained only if the history of wage increases in the immediate past had been low and if the workers could show productivity increases. School personnel were expected to qualify for settlements towards the low end of the guidelines.

5.2 RESTRAINT II - July, 1982

By July, 1982, the Provincial Government determined that because of the serious drop in budgeted revenues from resource industries, it did not have enough money to pay the amount budgeted for grants to school districts. Further, it was not

. . . /28

prepared simply to reduce its grants and allow previously acceptable levels of expenditure to continue, thereby forcing every board to incur a large 1982 deficit. Rather, two of the three major systems were dealt with in order to handle this problem.

5.2.1 The Funding System

The funding system was amended to reduce the grants to school districts. A reduction of $60 million was required, $37.5 million of which was to be removed in the period July 1982 through December 31, 1982. This was to be achieved by equal monthly reductions of the grant payments and represented approximately 2.3% of the already reduced 1982 operating budgets of school districts.

5.2.2 The Budget System

For 1983, the lack of provincial revenues could have been dealt with by permitting local boards to raise funds from the residential taxpayers. Some boards could have done this with comparatively little effort; others would have been unable to raise the required amounts. Permitting this to occur would have mitigated the restraint effort and could have increased inequities in the funding of education. As a result, it was necessary to deal with the budget system directly. This was done in a lengthy series of steps in the period July, 1982 to April, 1983.

The announcement of the reduction of grants in July, 1982 was accompanied by a Ministerial directive ordering 1982 operating expenditures to be reduced by 2.3%. However, since six of the ten months of school operation had already passed, the reduction probably amounted to as much as 9% of the portion of the budgets which were theoretically not yet spent.

The process by which reductions were calculated for each district in 1982 was cumbersome, but was assumed to require an equal effort from all districts. The districts were asked to achieve the reductions by immediately making non-salary reductions, negotiating salary reductions with their staffs, and tabling a plan for expenditure reductions with the Ministry of Education. If layoffs were called for in the plan, they required approval from the Ministry of Education.

At the same time, projected 1983 budgets were also announced. The 1983 budgets were essentially at 1982 levels, but there were projected additions to the budgets of some growing districts and deductions from the budgets of districts losing enrolment. Province-wide the net change in students was negative, so 1983 shareable operating budgets were announced at $1,699.6 million, a reduction of $6.1 million (0.36%) over the $1,705.7 million in final 1982 shareable operating budgets.

The public discussion about the ability of boards to meet the 1982 and 1983 budget targets culminated in the School Services (Interim) Act, which was tabled on September 28. The Act was intended to ensure that there were no layoffs of school district employees as a result of already announced budget reductions.

The Act made it possible for boards to eliminate non-instructional days for the 1982-83 school year, unless boards managed to reduce their 1982 budgets by October 15. Also, schools were closed five days in the spring of 1983 with the lost time being made up in the rest of the year. Boards were thus empowered to close schools on non-instructional days in 1982 in order to save money.

The School Services (Interim) Act reduced the financial problems arising from two reductions in 1982 spending levels. Much debate circulated around the Act, drawing attention away from the on-going effort to set appropriate 1983 budget levels for school boards. In November, 1982, revised 1983 budget levels were announced. The levels were essentially those announced in September with some minor modifications in the calculation procedures. The aim of controlling total expenditures remained in place.

In March, 1983, further revised 1983 budget levels were announced. A consensus had developed that the 1983 budgets would result in "too many" teacher layoffs in some districts in 1983. As a result, it was decided to revise projected 1983 budgets so as to enable districts to maintain September, 1982 pupil-teacher ratios. In addition, there was an attempt to provide "management adjustments" to districts which had exhibited low rates of expenditure growth, and to place districts with excess funds, as revealed by the fact that they did not have to make full use of the provisions of the School Services (Interim) Act or Bill 89 or that they generated 1982 surpluses, on the same financial footing as districts with "tight" budgets.

The March, 1983 calculation was a very complicated set of financial manipulations. The factors used in the calculation were historical and globalized measures of expenditures, enrolment, and staffing levels. They were based on summary statistics for each school district and therefore did not reflect differences due to the nature of educational programs and the attendant costs. While the calculations were by necessity complex, they were not based on clearly stated levels of service and calculations of required costs. The resulting claims and counter claims about the financial needs of the school system as reflected in 1983 budgets emphasized the need for a better method of dealing with the budget system.

5.2.3 The Tax System

In April, 1983, sources of funding for the final school board budgets had to be determined. The government dealt with the tax system in order to ensure that both residential and non-residential taxes for educational purposes would not increase in 1983. The total amount of residential tax collected in each school district was held constant or declined in some districts due to declining budgets. Wherever the total value of the residential tax base increased, school taxes for the average homeowner decreased from 1982 levels.

By 1983, the tax system led to a stabilization of residential property tax for school purposes. This is shown in Table 3. Net average taxes dropped in 1983 over 1982, and a further reduction in variation was achieved. The average tax dropped from $81 to $58 and one standard deviation in taxes dropped from $117 to $106. The system made extensive use of grants intended to limit each district's 1983 residential tax requirements to 1982 levels.

. . . /30

5.2.4 Compensation Stabilization

In July, 1982, revised compensation stabilization guidelines were released. These permitted wage increases from 0 to 10%. These guidelines reduced the allowable range and, if circumstances warranted, allowed for no increase.

In October, 1983, amended compensation stabilization guidelines were issued. These affected 1984 salaries in education. These guidelines permitted wage increases to range from -5% to +5%. As before, adjustments were to be permitted for past experience and increases in productivity. The further downward adjustment in the guidelines reflected increased concern on the part of the government over the ability of the revenue base to support the salaries of public sector personnel.

6. NEW SYSTEMS AND LONG-RANGE PLANS (1983 - 1984)

In May 1983 the Provincial Government, having set in place short-term restraint measures, turned its attention to the problem of establishing longer-range financial goals for the public sector, including the education system. In general, the goal was described as returning the system to the 1976 levels of service. In education, the major (and only) available service level indicator for 1976 was the pupil-teacher ratio of 19.14 pupils per teacher employed in the Province.

Addressing this objective in simple terms by forcing each school district to achieve the provincial average pupil/teacher ratio would have been impossible. Too many districts operate small, isolated schools for this to be achieved.

To address such a goal using the existing budgeting system would have been extremely difficult. The existing technology was not producing equitable treatment for school boards. The result of assigning proportional decreases to school board budgets, adjusting for enrolment changes, and then using a variety of minor adjustments was to freeze in the system past spending patterns of school boards. Some boards had developed far more extensive levels of educational programming than others. Some had taken significant measures to reduce levels of expenditure by cutting back programs whereas others had not. The old technology could not be used to move school board budgets in consistent and fair ways towards the new level of service described as the goal by the Provincial Government.

The Provincial Government, through the finance system then in place had no effective way of expressing its educational and financial policies through the budget development and information reporting system. There were obvious inequities even under restraint. For example, in the Lower Mainland per pupil operating costs in 1983 ranged from $2,983 in Delta to $3,920 in New Westminster. Levels of educational service in districts with this kind of spread in expenditure would obviously be different. The need for longer-range budget planning within defined financial targets was clear.

6.1 Objectives of the New System

It was decided that the existing budget and information system would be revised to enable better control over costs at both local and provincial levels and to display the link between policy decisions and costs, and to provide on-going assessment of the degree of both educational and financial equity existing between school boards. Specific objectives were:

1. Revising the budget and information systems to provide to the province and to school boards credible information about how resources were being spent in the school districts.

2. Developing information systems to enable better decisions concerning the appropriate level of school district spending and of provincial support of it, and to examine the effect on the system of proposed changes in expenditure.

. . . /32

3. Obtaining information which would enable assessments of the impact of provincial funding decisions on the educational aspects of the school system.

4. Establishing provincial standards for the delivery of service and by so doing allowing the province to set the level of critical resources being used in the system.

The new system enables the province to describe its position about the cost of education in educational terms. In so doing, the system ensures that every district can provide a basic educational program and is treated fairly in any measures of restraint, or in other kinds of financial decisions. Further, boards and their managers have clearly established budget targets for the next several years. Boards and their managers should be able to provide an equitable measure of educational service to each child. Parents should be able to assure themselves that a reasonable level of educational service is being provided.

The new system has been developed to meet these important criteria:

1. Financial planning by the Ministry and school boards will be on a major program basis. While it may be appropriate for individual boards to budget and fund on a more detailed program level, the provincial system will utilize as simple and generalized a program structure as possible, while ensuring that the objectives of the system are met.

2. Both the quantity of the service being delivered and the costs of delivering the service will be utilized in establishing expenditure levels.

3. Because external economic factors can generate financial problems for the educational system, the systems have been developed to recognize these, and can be adjusted as required.

4. In place of a system of automatic indexing to reflect and maintain the cost of the status-quo, financial targets will be specifically set for the next several years.

5. Levels of service will be set in accordance with educational criteria wherever practical to do so.

6. School boards will be able to decide on the specific amount of resources to be utilized on each program, but within a general framework which establishes general service levels for the province.

7. The accounting systems used by school boards will be modified to conform to the new budgetary structures. School board financial statements will reflect decisions about the funding provided to each program area.

. . . /33

6.2 Components of the Revised System

The new financial management system consists of a number of related systems. These are:

1. An improved information system which asks boards to fill in fewer forms, less often, with no duplication, in reporting on their finances and operations.

2. A fiscal framework system which sets the amount required to provide a basic educational service in each school district. This system uses a combination of provincially established standards (service levels) and provincially acceptable cost factors to establish the financial framework within which every board's budget must fit.

3. A new budgeting system which asks boards to show projected revenues and expenditures by educational activity.

4. A continued use of the new funding system introduced in 1982 under which every board receives at least 60% and as much as 95% of the funds required for its approved budget through taxes collected by the Province and distributed as grants, the size of which depends on the district's ability to raise school taxes.

5. A new accounting system which utilizes the program budget structure as its base and which will be used by all districts to record actual expenditures and revenues, and to produce year-end audited financial statements.

6.2.1 The Budgeting System

The form of the budgets presented by school boards to the Province provided no information about levels of expenditure in various program areas. For example, budgets did not display firm information about the relative expenditures on elementary instruction, secondary instruction, special education, or the costs of district administration and support services. The system did not show the relative levels of support by the Province and the local taxpayers to various programs. The questions as to who was paying for what, and how much should be spent, were unanswerable.

Nor did the former system provide enough information to enable good decision-making on the part of boards and it did not permit meaningful inter-district comparisons of costs.

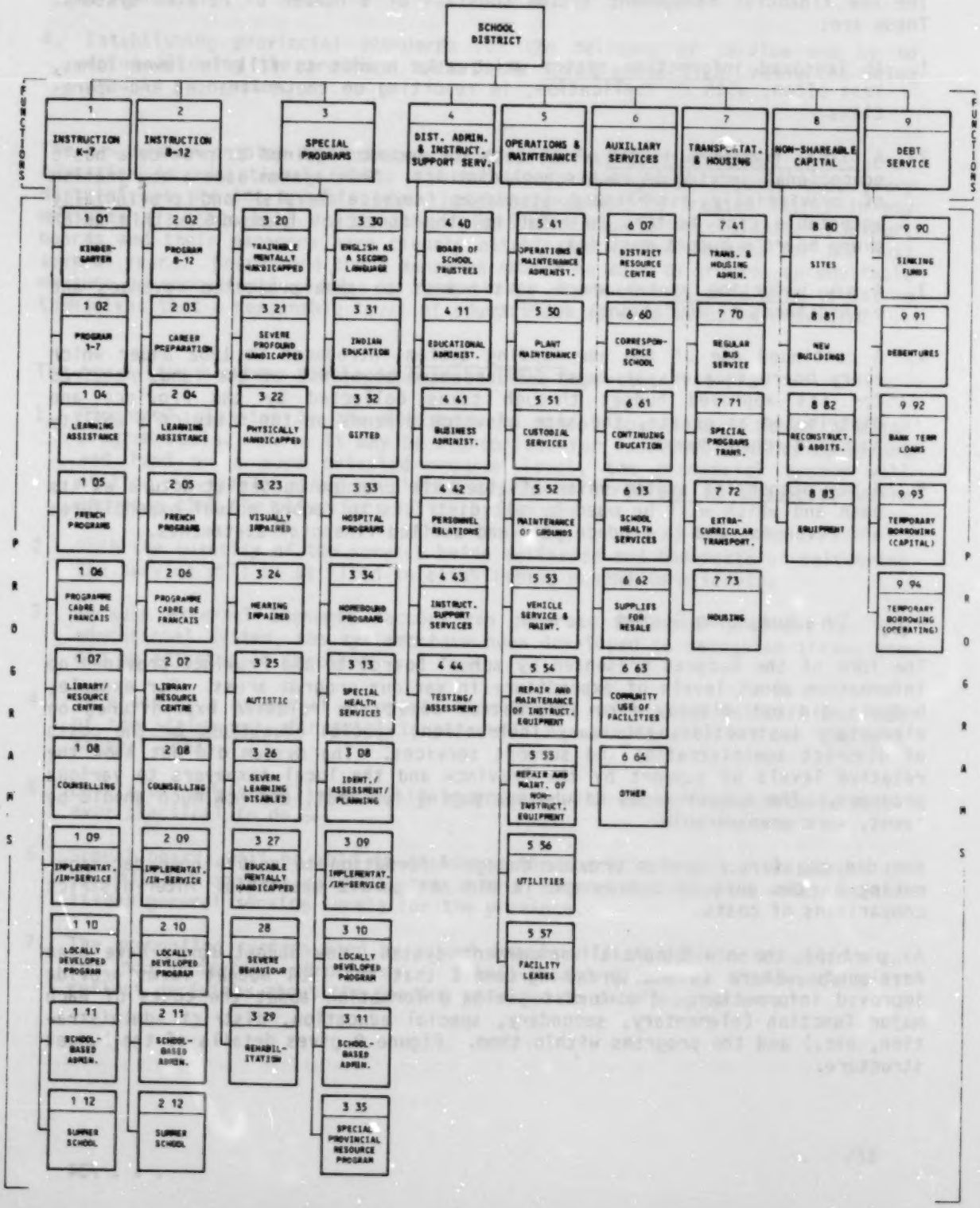
As part of the new financial management system new budget forms have been developed. There is widespread agreement that the 1984 budget forms provide improved information. The format yields information about the costs of each major function (elementary, secondary, special education, district administration, etc.) and the programs within them. Figure 9 gives details of the budget structure.

. . . /34

FIGURE 9

REPORTING STRUCTURE FOR

OPERATING BUDGET EXPENDITURES


SCHOOL DISTRICT
FUNCTIONS
PROGRAMS
1 INSTRUCTION K-7
1 01 KINDER-GARTEN
1 02 PROGRAM 1-7
1 04 LEARNING ASSISTANCE
1 05 FRENCH PROGRAMS
1 06 PROGRAMME CADRE DE FRANCAIS
1 07 LIBRARY/ RESOURCE CENTRE
1 08 COUNSELLING
1 09 IMPLEMENTAT./IN-SERVICE
1 10 LOCALLY DEVELOPED PROGRAM
1 11 SCHOOL-BASED ADMIN.
1 12 SUMMER SCHOOL
2 INSTRUCTION 8-12
2 02 PROGRAM 8-12
2 03 CAREER PREPARATION
2 04 LEARNING ASSISTANCE
2 05 FRENCH PROGRAMS
2 06 PROGRAMME CADRE DE FRANCAIS
2 07 LIBRARY/ RESOURCE CENTRE
2 08 COUNSELLING
2 09 IMPLEMENTAT./IN-SERVICE
2 10 LOCALLY DEVELOPED PROGRAM
2 11 SCHOOL-BASED ADMIN.
2 12 SUMMER SCHOOL
3 SPECIAL PROGRAMS
3 20 TRAINABLE MENTALLY HANDICAPPED
3 21 SEVERE PROFOUND HANDICAPPED
3 22 PHYSICALLY HANDICAPPED
3 23 VISUALLY IMPAIRED
3 24 HEARING IMPAIRED
3 25 AUTISTIC
3 26 SEVERE LEARNING DISABLED
3 27 EDUCABLE MENTALLY HANDICAPPED
28 SEVERE BEHAVIOUR
3 29 REHABIL-ITATION
3 30 ENGLISH AS A SECOND LANGUAGE
3 31 INDIAN EDUCATION
3 32 GIFTED
3 33 HOSPITAL PROGRAMS
3 34 HOMEBOUND PROGRAMS
3 13 SPECIAL HEALTH SERVICES
3 08 IDENT./ ASSESSMENT/ PLANNING
3 09 IMPLEMENTAT./IN-SERVICE
3 10 LOCALLY DEVELOPED PROGRAM
3 11 SCHOOL-BASED ADMIN.
3 35 SPECIAL PROVINCIAL RESOURCE PROGRAM
4 DIST. ADMIN. & INSTRUCT. SUPPORT SERV.
4 40 BOARD OF SCHOOL TRUSTEES
4 11 EDUCATIONAL ADMINIST.
4 41 BUSINESS ADMINIST.
4 42 PERSONNEL RELATIONS
4 43 INSTRUCT. SUPPORT SERVICES
4 44 TESTING/ ASSESSMENT
5 OPERATIONS & MAINTENANCE
5 41 OPERATIONS & MAINTENANCE ADMINIST.
5 50 PLANT MAINTENANCE
5 51 CUSTODIAL SERVICES
5 52 MAINTENANCE OF GROUNDS
5 53 VEHICLE SERVICE & MAINT.
5 54 REPAIR AND MAINTENANCE OF INSTRUCT. EQUIPMENT
5 55 REPAIR AND MAINT. OF NON-INSTRUCT. EQUIPMENT
5 56 UTILITIES
5 57 FACILITY LEASES
6 AUXILIARY SERVICES
6 07 DISTRICT RESOURCE CENTRE
6 60 CORRESPON-DENCE SCHOOL
6 61 CONTINUING EDUCATION
6 13 SCHOOL HEALTH SERVICES
6 62 SUPPLIES FOR RESALE
6 63 COMMUNITY USE OF FACILITIES
6 64 OTHER
7 TRANSPORTAT. & HOUSING
7 41 TRANS. & HOUSING ADMIN.
7 70 REGULAR BUS SERVICE
7 71 SPECIAL PROGRAMS TRANS.
7 72 EXTRA-CURRICULAR TRANSPORT.
7 73 HOUSING
8 NON-SHAREABLE CAPITAL
8 80 SITES
8 81 NEW BUILDINGS
8 82 RECONSTRUCT. & ADDITS.
8 83 EQUIPMENT
9 DEBT SERVICE
9 90 SINKING FUNDS
9 91 DEBENTURES
9 92 BANK TERM LOANS
9 93 TEMPORARY BORROWING (CAPITAL)
9 94 TEMPORARY BORROWING (OPERATING)

Under the former budget system, school boards reported the sources of expected revenues, but not their expectations as to the amounts of residential property tax, grants from non-residential tax sources or grants from other provincial tax sources. Boards will now be asked to submit a revenue plan which shows revenues equalling total expenditures. Further, they must show their opinions as to the appropriate source of funds and how they intend to apply those funds to support their proposed expenditures. This will enable more informed discussion as to who is to pay for what, and in what amounts.

6.2.2 Fiscal Framework System

Although it is now clear that restraint will be a feature of the system for all of the foreseeable future, the imposition of restraint during 1982 and 1983 had been characterized by some necessary confusion as ad hoc measures were quickly taken to meet the urgent needs to respond to the decline in government revenue. Improved financial management systems have been designed with a longer-range view in mind. These should ensure equitable treatment of all school boards and the necessary fiscal controls to ensure effective on-going management of the system.

The Provincial Government has established financial targets for the system which call for a return to levels of service much like those which prevailed in the mid-seventies. This does not, however, mean that the nature of the services provided in years to come will be the same as ten years ago. Programming and resource priorities have shifted and are expected to remain shifted. For example, the system places a higher priority now on meeting special needs of pupils than it did in former years.

The government is committed to bringing the costs of instruction in the system down by the equivalent of an increase in the pupil-teacher ratio to the same level as it was in the 1975-76 school year. The target is to be achieved in three years. The calculations of budget targets were based on removing enough teaching positions to effect the financial equivalent of an increase in the pupil-teacher ratio from 17.11 to 19.14 as a provincial average. In addition, the system is designed to ensure equitable distribution of available funds.

The management of the actual dollar reduction is left to individual school boards. Decisions from district to district will vary widely because of local circumstances. The actual increase in the pupil-teacher ratio in any district may be more or less than 2. This will depend on decisions of each school board and varying present circumstances. Hence, we cannot predict accurately the actual reduction in the number of teaching jobs.

Below are listed the specific budget targets for the system over the next three years. They do not account for possible changes in salary costs due to increased salary scales, increments, or cost increases due to changes in teacher qualifications in 1984 or thereafter. Such changes may possibly be reflected in changed target levels in accordance with future provincial government policy.

. . . /36

The target total gross shareable operating budgets for the system are presently estimated to be:

1983	actual:	$1,573.6 million
1984	projected:	1,553.4 million
1985	projected:	1,523.9 million
1986	projected:	1,494.5 million

In order to ensure that the education system will operate in a manner consistent with these targets, a system of provincially-established service levels and a costing system have been established. These systems indicate to each board the total operating budget that it will be allowed to spend.

The service levels represent the required amount of resources to cover each program area of the budget. It will be possible under the new system for every board to provide the equivalent of these levels of service. However, to do so costs will have to be kept in line with those described in the costing system.

The cost factors describe the major "cost-drivers" in the system. Aside from enrolment, by far the most important factors used are the district and provincial average teachers' salaries. Many service levels are described in terms of the staffing resources needed to provide the service. The levels of salary and their attendant costs for all personnel in the education system will be controlled through the provincial Compensation Stabilization Plan in the years ahead.

The service level for any program, combined with the corresponding cost factor gives the number of dollars in the fiscal framework that could be used by the Board to deliver that program. A similar calculation is done for every program in the board's budget. Results are summed across all boards to arrive at the provincial fiscal framework.

6.2.3 Additions to the Fiscal Framework

Because teacher pension costs have historically been calculated separately, the total required amount for teachers' pensions in the district will be added to the fiscal framework rather than being built into the cost factors.

Costs of offering services are clearly higher in districts which are geographically remote or which have schools that are widely dispersed. A fairly complex set of indices have been created to measure the effect of these factors on district costs. "Remote" or "dispersed" districts will benefit by having additional funds generated and added to the Board's fiscal framework.

. . . /37

A number of programs in the budget structure have no defined service levels because the choice of whether to offer these programs has been a purely local one. A general cost factor to cover all such programs will be added to the fiscal framework of every board.

6.2.4 3-Year Transition to the Fiscal Framework

Many districts would have considerable difficulty in adjusting programs for 1984 to comply with the provincial standards as expressed in the service levels used to develop the fiscal framework. Therefore, in all districts where the fiscal framework produces less potential expenditure than the previous years' budget, (after the effects of salary increases and enrolment changes are discounted) an adjustment will be made in 1984 and 1985. All districts will be fully limited to budget levels produced by the fiscal framework in 1986.

For 1984 the adjustment will be developed as follows:

1. The 1984 fiscal framework for every district will be calculated without changes or adjustments to enrolment numbers used in the previous year, or for possible changes in salaries.

2. Where the 1984 fiscal framework provides for less than the approved 1983 budget plus approved on-going 1983 deficits, two-thirds of the difference will be designated as an adjustment.

3. The 1984 fiscal framework will be recalculated for each district, taking into account salary changes, if any, and the changes in enrolment from levels used to calculate 1983 budgets.

4. The adjustment calculated in #2 above will be added to the fiscal framework calculated in #3 above to give the allowable gross operating budget for 1984.

A similar calculation will be used in 1985:

1. The 1985 fiscal framework for every district will be calculated, without changes or adjustments for enrolment numbers used in the previous year, or for possible changes in salaries.

2. Where the 1985 fiscal framework provides for less than the approved 1984 budget plus approved 1984 deficits, one-half of the difference will be designated as an adjustment.

3. The 1985 fiscal framework will be recalculated for each district, taking into account salary increases, if any, and the changes in enrolment from levels used to calculate 1984 budgets.

4. The adjustment calculated in #2 above will be added to the fiscal framework calculated in #3 above to give the allowable gross operating budget for 1985.

. . . /38

In 1986 the calculation of the fiscal framework for each school district will determine the allowable gross operating budget for each district.

This system gives every district three years to adjust staffing levels, salary patterns, and program delivery systems in order to manage within the financial constraints imposed on them by the fiscal framework system. By that time, any minor problems with service levels or the costing system indicated by experience in using the new financial system will have been adjusted. The system will also be monitored closely, and adjusted, if necessary, to ensure that all districts can operate basic educational programs within the fiscal framework established by the province.

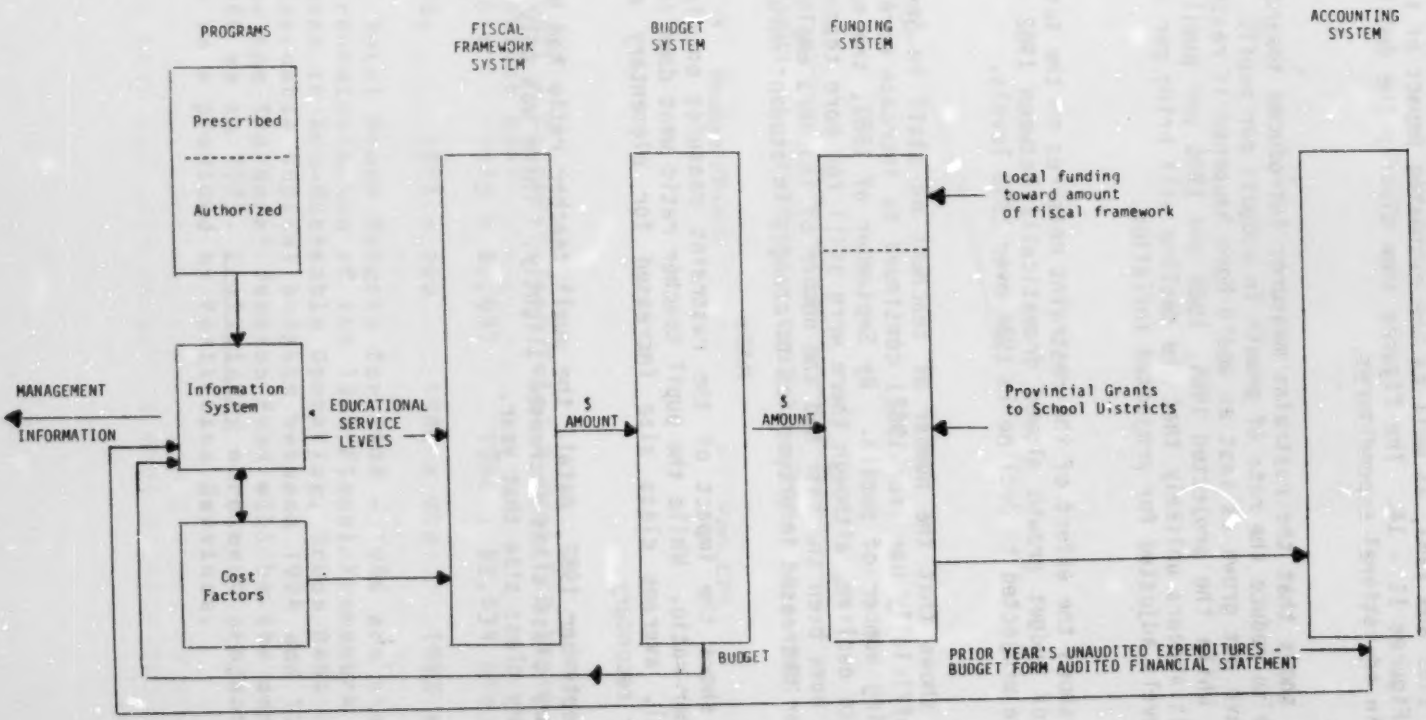
6.2.5 Overview of the New System

A summary of the new system is provided in Figure 10. This figure identifies each of the systems, and shows how they inter-relate. It is hoped that it will be possible to improve the future quality of debate about education and educational finance by focussing on the components.

. . . /39

FIGURE 10

INFORMATION FLOW



7. CONSEQUENCES OF RESTRAINT AND THE NEW SYSTEMS

It is possible to examine the financial impact of the restraint measures implemented in 1982 and 1983, as well as the estimated impact of the new systems are shown in Figures 11 - 14. The figures show clearly the decline in the rate of increase in educational expenditures.

Figure 11 shows that the restraint measures introduced towards the end of 1982 did little to reduce the rate of growth in budgets per pupil. However, the 1983 budgets have not grown as fast as would have happened if restraint had not been applied. While the projected 1984, 1985 and 1986 per pupil budgets actually decline, it appears unlikely that the decline will bring per pupil expenditures to 1981 levels adjusted for projected inflation.

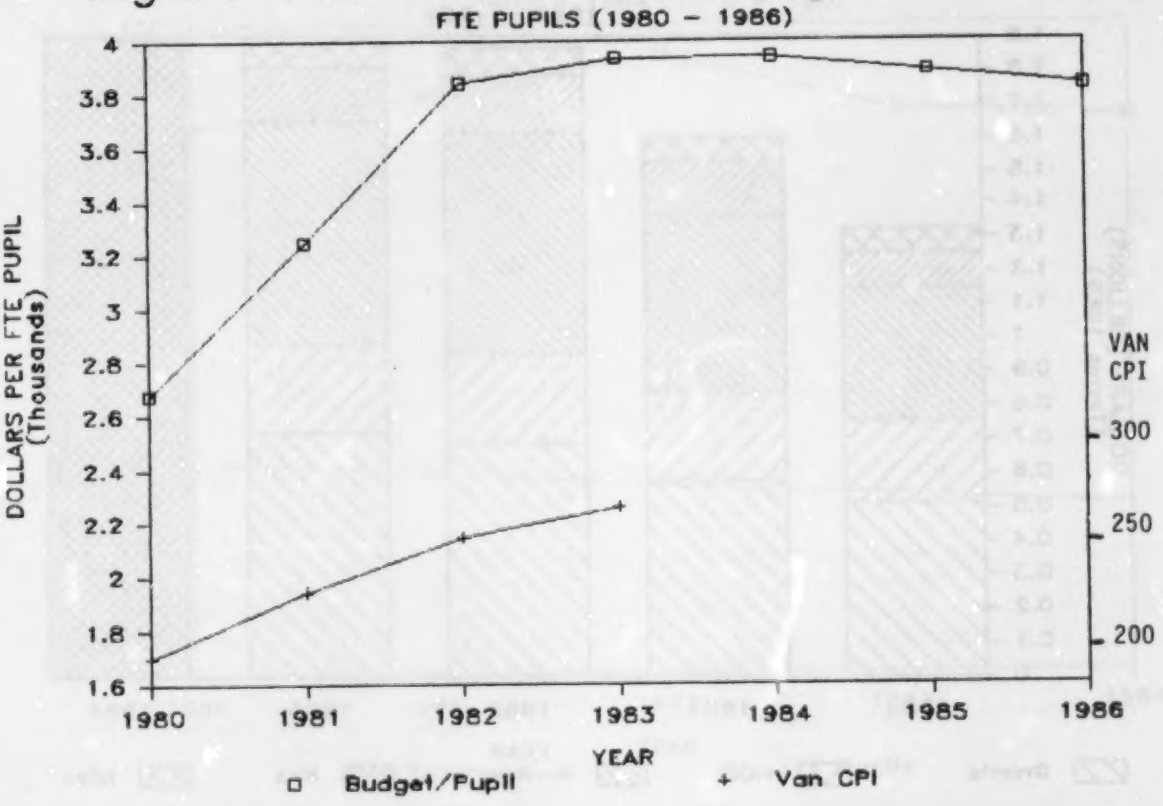
Figure 12 shows the effect of the restraint measures on the total gross budgets. The rate of budget growth slowed dramatically between 1982 and 1983. Total budgets are projected to decline in 1984 over 1983 levels.

Figure 13 shows that the number of teachers on staff in September 1981 (the numbers officially used for 1982) continued to increase more rapidly than the corresponding number of pupils. By September of 1983, the number of teachers had begun to decline, although there were still far more teachers in the system than would have been the case had the number of teachers employed in the system increased or decreased in proportion to changes in student enrolment.

Figure 14 shows the impact of the restraint measures on class size and the pupil-teacher ratio. While the pupil teacher ratio went down in 1982 (September 1981, data), average class size increased for elementary and continued to decline for secondary.

By 1983 (September 1982, data), the pupil teacher ratio had begun to increase and secondary class sizes increased slightly. There was only a small increase in elementary class size that year.

Figure 11. Total Gross Budget Per Pupil



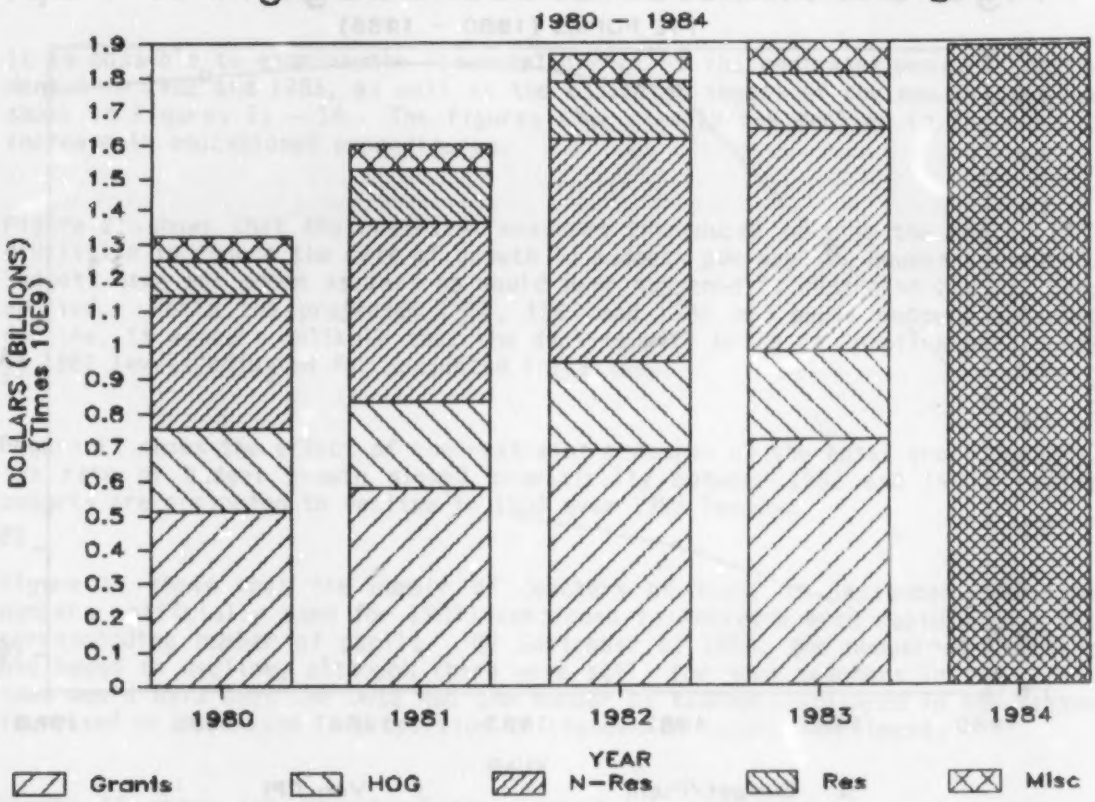
NOTE:

1. Budget per pupil = Calendar Year Total Budget/FTE Pupils in September of previous year.
   1980 = $2,678 1983 = $3,937 1986 = $3,834 projected

2. Vancouver CPI: 1971 = 100 1980 = 209 1983 = 278.6

3. Estimates of Total Gross Budgets for 1984 - 1986 are based on the January 13 re-calculation of the 1984 Fiscal Framework and assume no increase in Non-Shareable Operating, Gross Debt Service and Gross Non-Shareable Capital budgets between 1984 and 1986. They also assume the Teachers' Pension Fund will be the same in 1984 through 1986 as in 1983. Preliminary enrolment projections for those years were provided by Facilities Services.

Figure 12. Total Gross Budgets



NOTE:

1. Provincial grant includes Teachers' Pension Fund, grants to non-shareable operating accounts (less Post-Secondary allocations) and the provincial share of debt service, but excludes the Home Owner Grant.

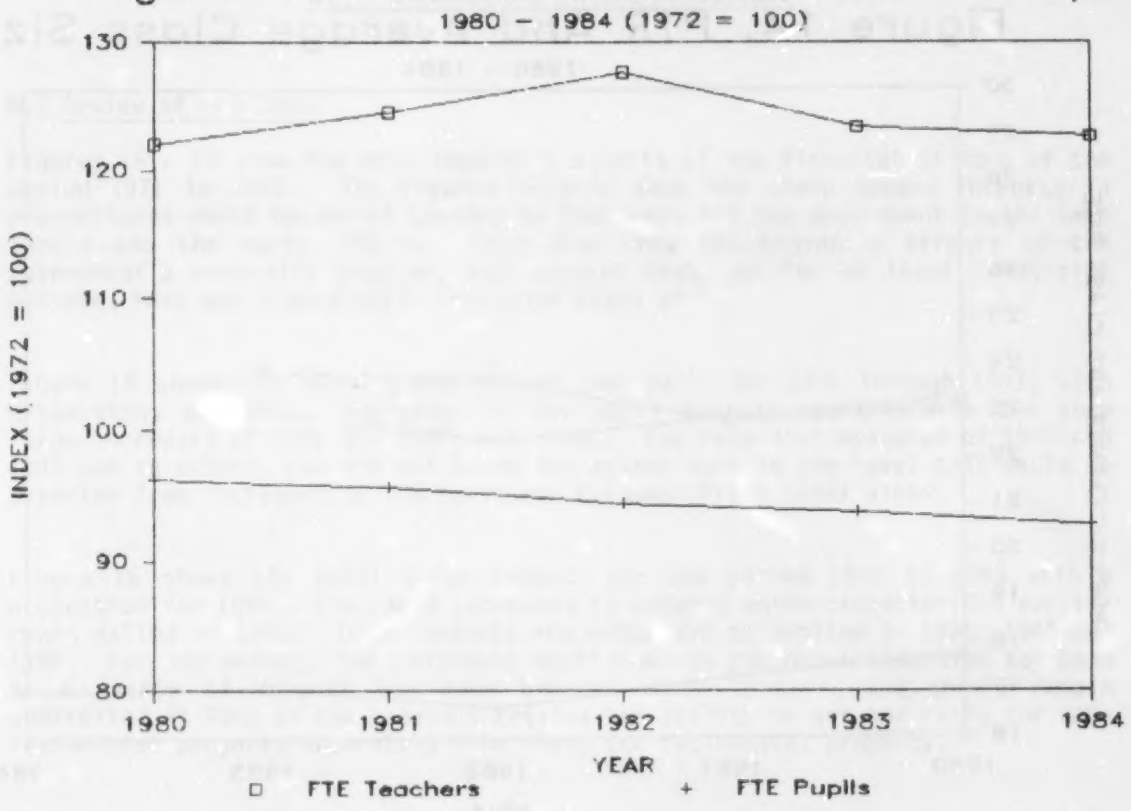
2. Home Owner Grant includes amounts paid by both the Ministries of Education and Municipal Affairs prior to 1982.

3. Total budgets (millions):
   1980 = $1,324 1983 = $1,898.8 1984 $1,885.1

4. Note that 1984 budgets are projected to decline by $13.7 million compared to 1983.

5. Estimate of total gross budget for 1984 (shown as ▩) based on the assumptions in Note 3 (Figure 11). Tax detail not available.

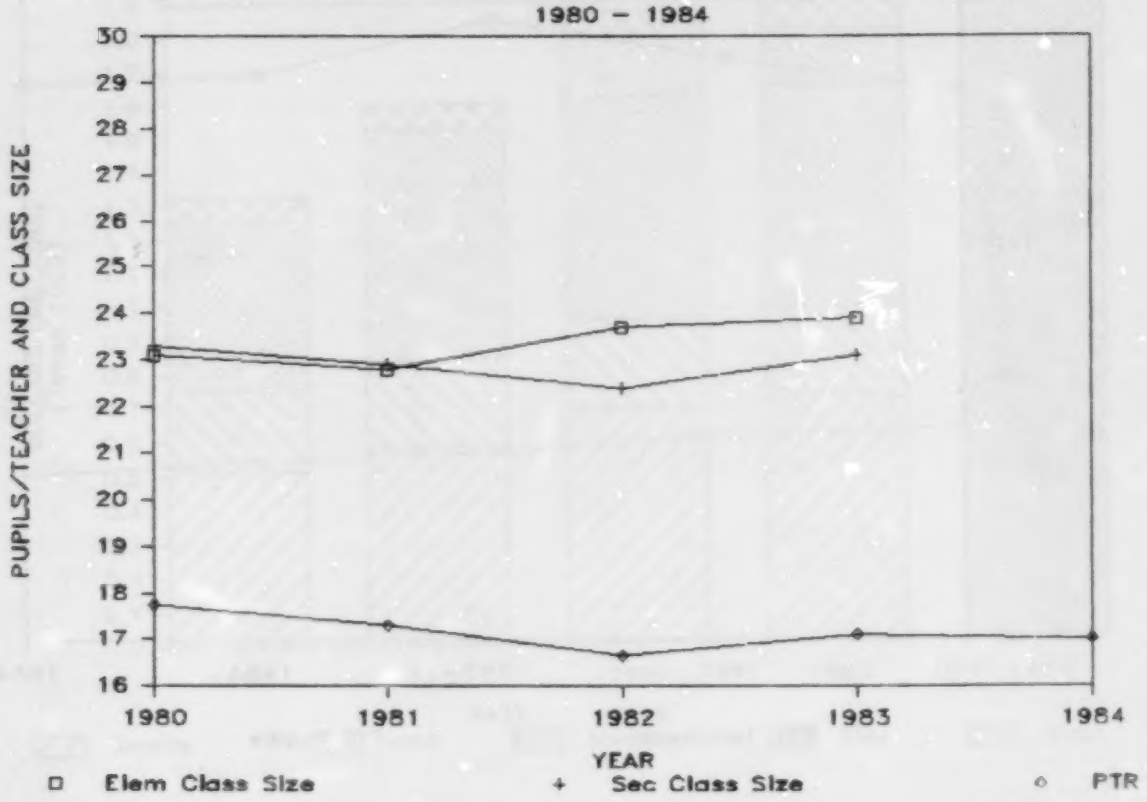
Figure 13. Index: FTE Teachers & Pupils



NOTE:

1. FTE Teachers: 1980 = 27,861 1984 = 28,024.
   FTE Pupils: 1980 = 494,522 1984 = 478,544.

Figure 14. PTR And Average Class Size



NOTE:

1. Class sizes and number of teachers & pupils are as at September of the previous year.

2. Elementary Class Size: 1980 = 23.1 1983 = 23.9 (1984 N/A)
   Secondary Class Size: 1980 = 23.3 1983 = 23.1 (1984 N/A)
   Pupil/Teacher Ratio: 1980 = 17.75 1983 = 17.11 1984 = 17.02

8. SUMMARY AND FUTURE DIRECTIONS

8.1 Review of the Data

Figures 15 - 19 show the most important aspects of the financial history of the period 1971 to 1983. The figures clearly show the sharp upward increase in expenditures which became of concern to taxpayers and the government in the late 1970's and the early 1980's. They also show the beginning effects of the government's restraint program, and suggest that, so far at least, restraint measures have not dramatically increased class size.

Figure 15 shows the total gross budgets per pupil for 1971 through 1983, with projections to 1986. Increases in per pupil budgets, particularly the very large increases of 1981 and 1982, are shown. The restraint measures of 1982 and 1983 had an effect, but did not bring the system back to the level that would be expected from increases in the Vancouver Consumer Price Index alone.

Figure 16 shows the total gross budgets for the period 1971 to 1983 with a projection for 1984. The rapid increases in budgets which characterized earlier years halted in 1983. Total budgets are projected to decline in 1984, 1985 and 1986. For the moment, the continued shift towards the non-residential tax base as a source of support has been brought under control, and should remain controlled as long as the Province retains the ability to set tax rates for non-residential property separately from those for residential property.

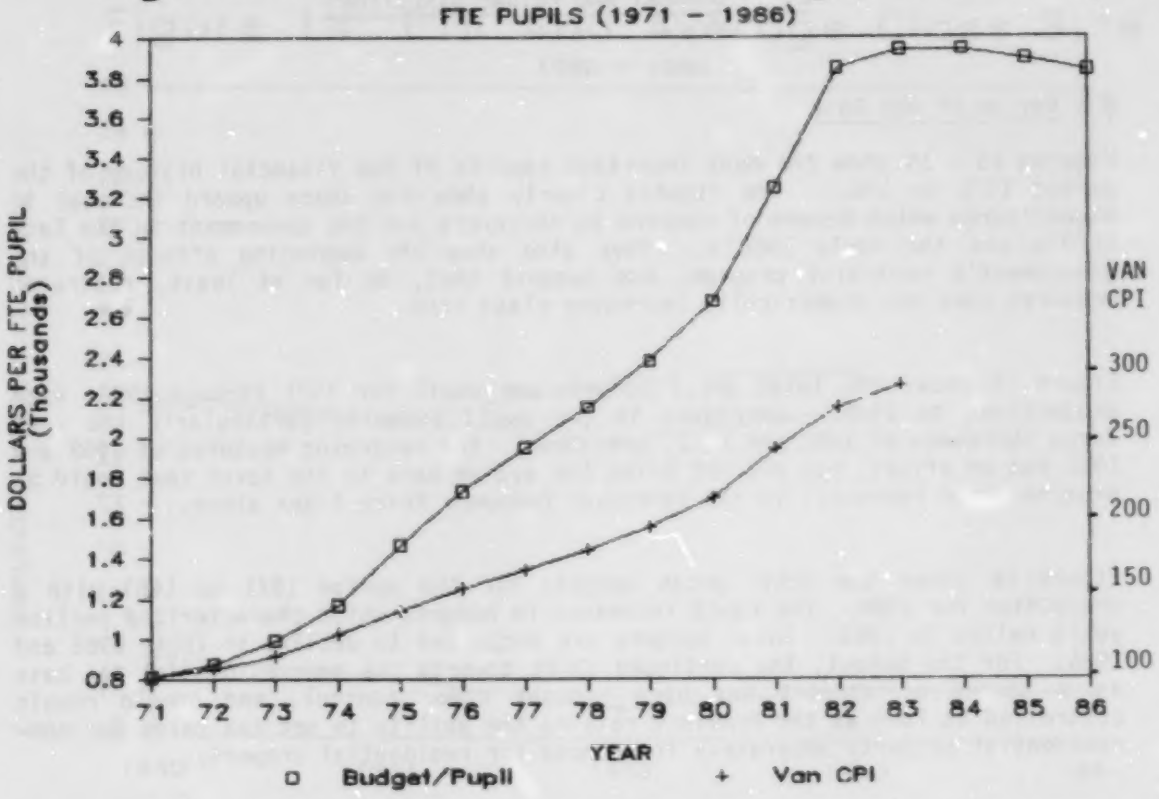
Figure 17 shows the long-term trend in the relationship between the numbers of teachers and students. The recent, well-publicized decline in the number of teachers relative to the number of students is clearly shown. Placed in a long-term relative perspective however, it does not indicate a serious erosion of the teaching services available to students.

Figure 18 shows the long-term trends in the relationship between the number of teachers and class size. Again, in the perspective of time, changes in the pupil-teacher ratio have not been proportional to changes in class size. Provided that school districts allocate their teaching resources carefully, an increase in the pupil-teacher ratio should not have a serious impact on class size.

The possibility for reallocating certified staff so as to maintain class size while increasing the pupil-teacher ratio is suggested by Figure 19. This figure shows that school boards have increased the number of personnel allocated to administration and support roles, even as they have reduced the number of personnel in direct teaching roles.

. . . /46

Figure 15. Total Gross Budget Per Pupil



NOTE:

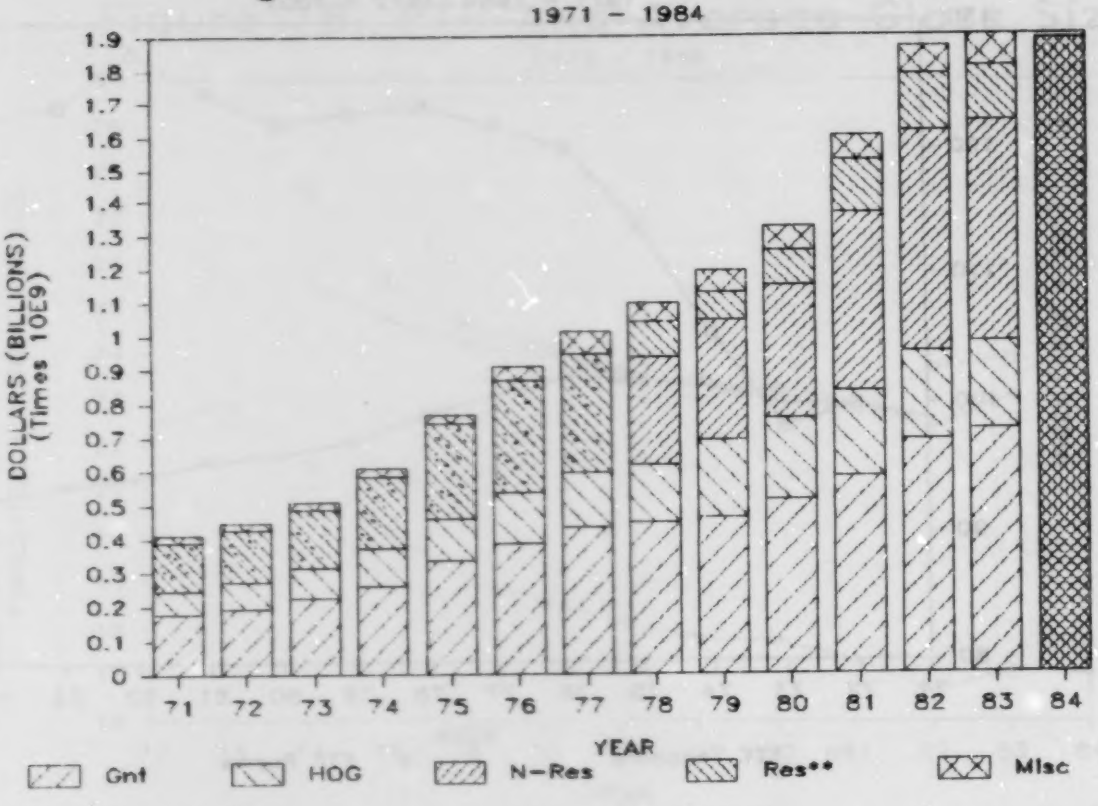
1. Budget per pupil = Calendar Year Total Budgets/FTE Pupils in September of previous year.
   1971 = $813 1983 = $3,937 1986 = $3,834 projected

2. Vancouver CPI: 1971 = 100 1983 = 278.6

3. Estimates of total gross budgets for 1984 - 1986 are based on the January 13 re-calculation of the 1984 Fiscal Framework and assume no increase in Non-Shareable Operating, Gross Debt Service and Gross Non-Shareable Capital budgets between 1984 and 1986. They also assume the Teachers' Pension Fund will be the same in 1984 through 1986 as in 1983. Preliminary enrolment projection for those years were provided by Facilities Services.

Figure 16. Total Gross Budgets

1971 - 1984



NOTE:

1. Provincial grant includes Teachers' Pension Fund, grants to non-shareable operating accounts (less Post-Secondarl allocations) and the provincial share of debt service, but excludes the Home Owner Grant.

2. Home Owner Grant includes amount paid by the Ministries of Education and Municipal Affairs prior to 1982. The School Tax Removal Grant (1974 & 1975) is included in the HOG. Revenue Surplus Appropriation (Ministries of Education and Municipal Affairs) is included in the HOG in 1979.

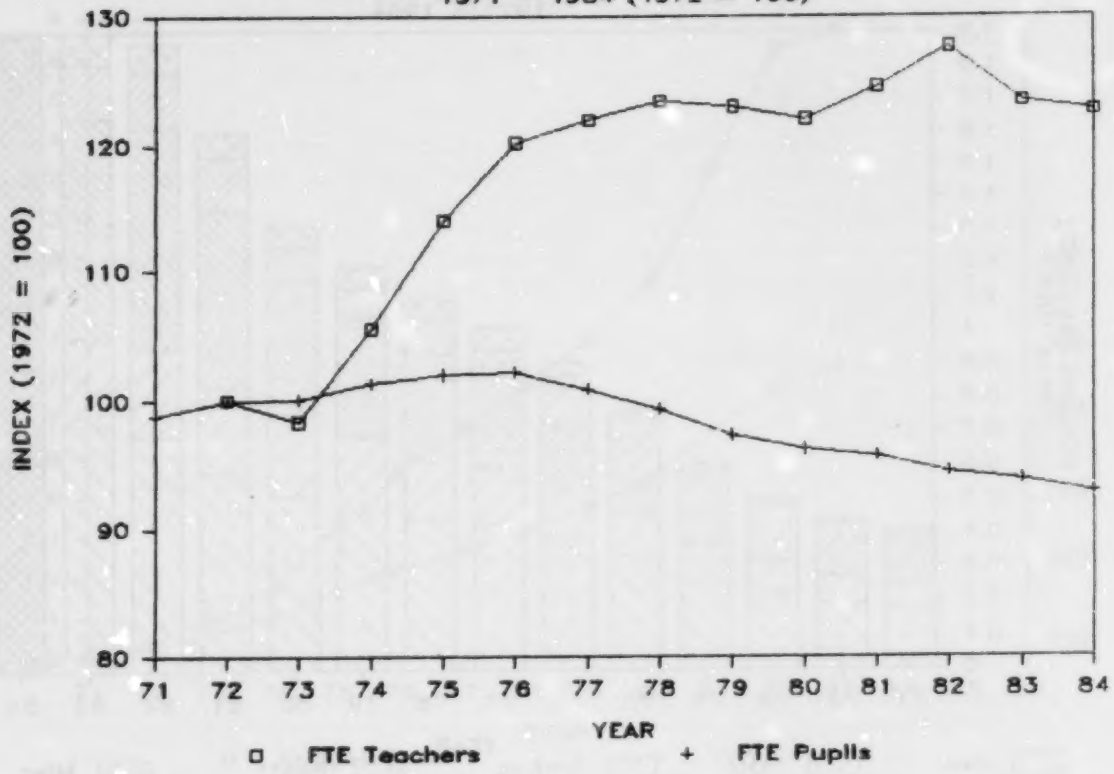
3. Total budgets (millions):
   1971 = $412.9 1983 = $1,898.8 1984 = $1,885.1 projected.

4. Estimate of total gross budget for 1984 (shown as ▨) is based on the assumptions in Note 3 (Figure 15). Tax detail not available.

**Prior to 1978, Residential and Non-Residential Taxation cannot be separated and are shown as ▨

Figure 17. Index: FTE Teachers & Pupils

1971 – 1984 (1972 = 100)

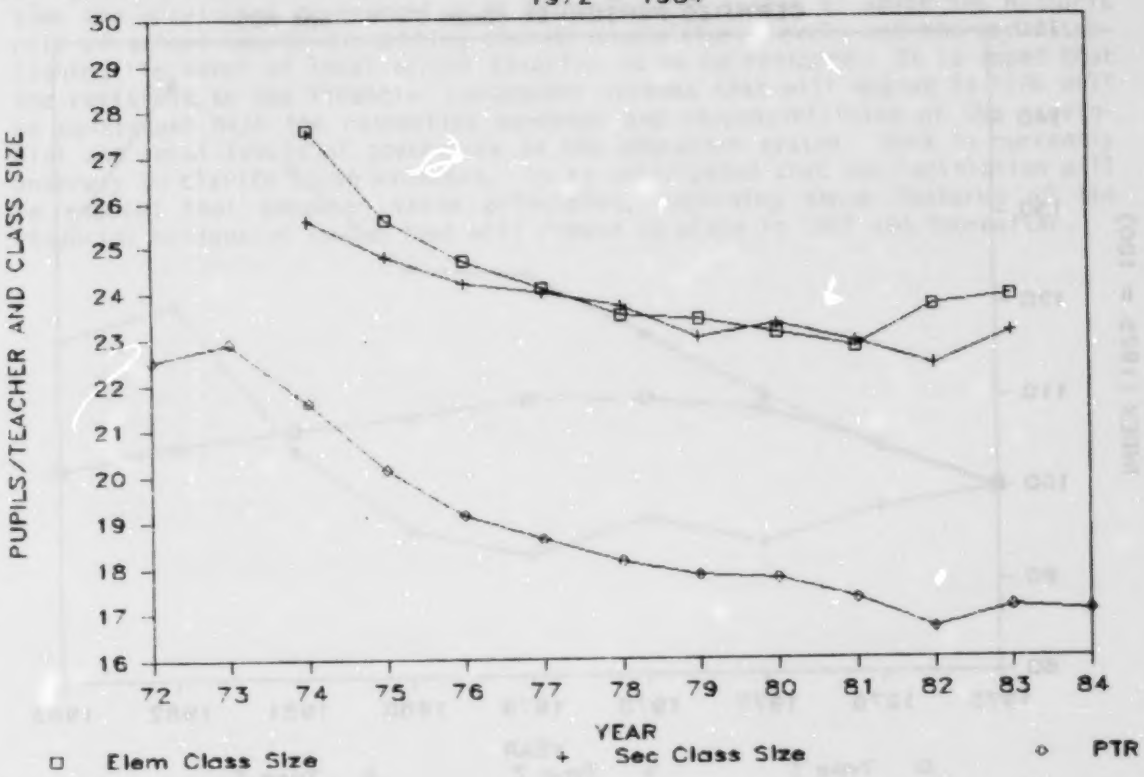


NOTE:

1. FTE Teachers: 1972 = 22,839 1984 = 28,024.
   FTE Pupils: 1972 = 514,217 1984 = 478,544.

Figure 18. PTR And Average Class Size

1972 - 1984



NOTE:

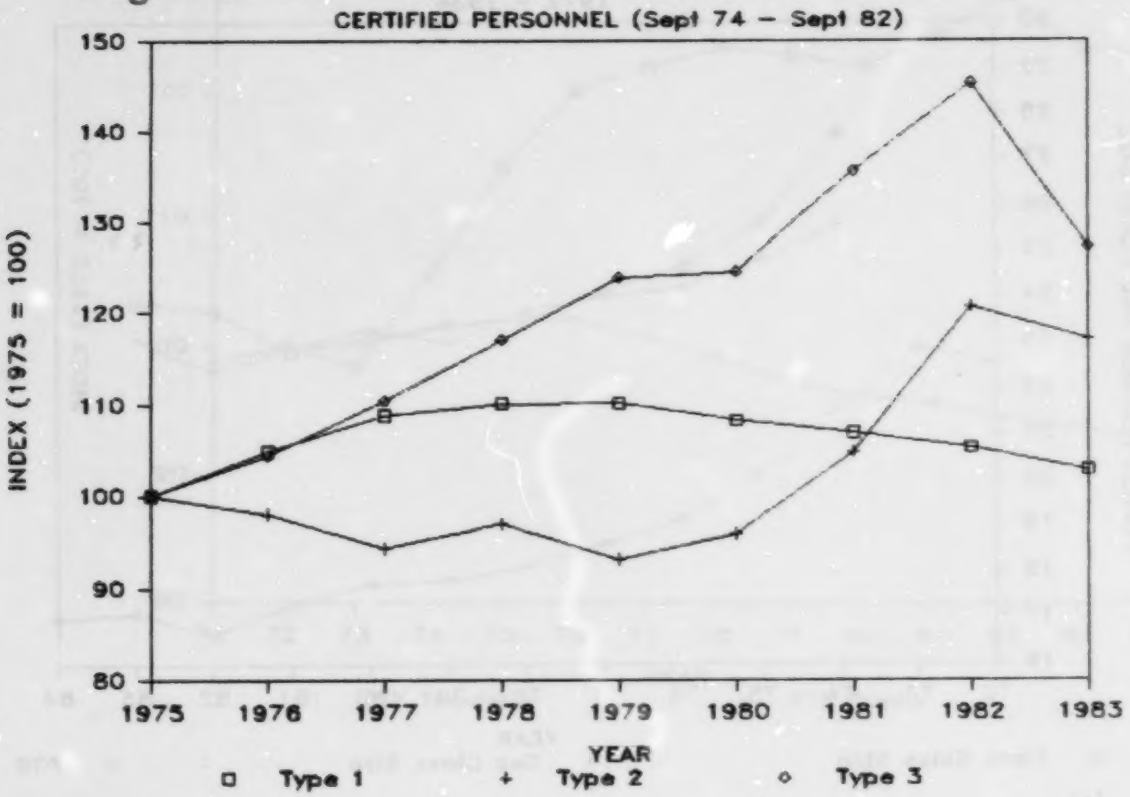
1. Class sizes and number of teachers & pupils are as at September of the previous year.

2. Class size data not available 1972, 1973 or 1984.

Elementary:	1974 = 27.6	1983 = 23.9
Secondary:	1974 = 25.6	1983 = 23.1

3. P/T Ratio: 1972 = 22.51 1983 = 17.11 1984 = 17.02

Figure 19. Staff Allocation 1975 - 1983



NOTE:
1. Staff allocation data are as at September of the previous year.
2. Type 1 includes FTE Regular Classroom Teachers
   1975 = 18,131 1983 = 18,644
   Type 2 includes FTE Vice-Principals, Department Heads and Other Instructional Staff
   1975 = 5,990 1983 = 7,018
   Type 3 includes FTE Principals, District-Wide Instructors and Supervisors
   1975 = 1,902 1983 = 2,419

8.2 Future Developments

The present restraint legislation expires at the end of 1986. Prior to that time the provincial government must determine the extent to which the historic role of school boards in setting overall expenditure levels and thereby establishing the level of local school taxation is to be restored. It is hoped that the revisions to the financial management systems that will emerge in 1986 will be consistent with the respective mandates and responsibilities of the provincial and local levels of governance in the education system. Work is currently underway to clarify these mandates. It is anticipated that new legislation will be enacted that embodies these principles, including those features of the financial management system that will remain in place in 1987 and thereafter.

DATA SOURCES FOR BACKGROUND PAPER

84/04/04
JH-10-75

1. BUDGET DATA

For Shareable Operating, Non-Shareable Operating, Debt Service and Non-Shareable Capital Budgets:

Gross Budgets (without Pensions)	- Ministry of Education (Composites/Final Determinations)
Teachers' Pensions	- Blue Book Estimates except 1983 (from Ed. Final Determinations)

The total budget for 1984 is based on the January 13, 1984 re-calculation of the 1984 Fiscal Framework plus 1984 estimates of Non-Shareable Operating, Debt Service and Non-Shareable Capital budgets plus the 1983 estimate of Teachers' Pensions.

2. REVENUE DATA

Miscellaneous Revenue	- Ministry of Education (Composites/Final Determinations)
Provincial Grants	- Ministry of Education (Composites/Final Determinations)
Property Taxation	- Ministry of Education (Composites/Final Determinations)
Non-Residential	- Ministry of Education (Source and Application of Budgeted Revenue) (Available beginning in 1978)
Residential	- Ministry of Education (Total Property Taxation less Non-Residential Taxation for 1978 through 1981, 1982 and 1983 = Final Determinations)
Teachers' Pensions	- as above
Homeowner Grant	- 1971 = Blue Book Estimates 1972 - 1981 = Public Accounts 1982 = Final Financial Management Reports 1983 = Blue Book Estimates

.../ 2

3. FTE DATA

FTE Teachers - 1972 through 1975 = Data Services

- 1976 through 1984 = Official Ministry Data (Data & Office Technology)

1972-1975 = Form J,
1976-1982 = Form AD, 1983 = Form 2003,
1984 = Form 1505

FTE Pupils - 1971 through 1975 = Statistical Services (Historical Compendium)

- 1976 through 1984 = Official Ministry Data (Data & Office Technology)

1971-1975 = Form B,
1976-1979 = Form AD, 1980-1981 = Form I,
1982 - 1984 = Form 1501

Staff Allocation Data

Data & Office Technology (Ministry of Education)

1975 through 1981 = Form J
1982 and 1983 = Forms 2002 & 2003

4. CLASS SIZES AND PUPIL TEACHER RATIOS

Average Elementary & Secondary Class Sizes

Data & Office Technology (Ministry of Education)

1976 through 1981 = Form J
1982 and 1983 = Forms 1501 & 2003

Pupil/Teacher Ratios

$$\frac{\text{FTE Teachers}}{\text{FTE Pupils}}$$

5. VANCOUVER CONSUMER PRICE INDEX

Central Statistics Bureau (Ministry of Municipal Affairs)